

<120> COMPOSITIONS AND METHODS FOR THE THERAPY
AND DIAGNOSIS OF BREAST CANCER

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<140> US
<141> 2001-08-07
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<170> FastSEQ for Windows Version 4.0

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cacctccagg	aggcttatcg	gatttacacc	ccttttgacc	tggcagcccc	cgaaaatagc	240
catgctctta	atttggcatt	tgtggctcag	gcagccccag	atagtaaaag	gaaactccaa	300
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ttt						363

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<400> 2
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<220>

<221> misc_feature

<222> 559, 574, 576, 581, 582, 587, 589, 593, 594, 609, 627, 640,
659, 668, 672, 677, 691, 713, 714, 732, 741, 812, 813, 823,
825, 829, 838, 845, 849, 852, 855, 856, 859, 874, 876, 877,
892, 902, 907, 916, 917, 938, 950, 951, 952, 953, 960

<223> n = A,T,C or G

<221> misc_feature

<222> 965, 974, 976, 978, 982, 996, 1005, 1012, 1049, 1058, 1073,
1074, 1082, 1084, 1086

<223> n = A,T,C or G

<400> 4

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gctttaaagt actgttagtg agaaattaaa attccttcag gaggattaaa ctgccatttc 480
agttacccta attccaaatg ttttgggtgt tagaatcttc tttaatgttc ttgaagaagt 540
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acgggtttcc tgttttagtt aggatggccc anntctgacc ccnntatcnt cccctcngc 840
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cnantnt 1087
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<210> 5

<211> 1010

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

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424, 430, 433, 454, 463, 465, 467, 476, 497, 499, 550, 562,
564, 587, 591, 595, 597, 598, 612, 625, 631, 640, 641, 645,
648, 656, 661, 665, 666, 670, 674, 675, 681, 682, 683

<223> n = A,T,C or G

<221> misc_feature

<222> 687, 688, 692, 710, 721, 778, 788, 811, 820, 830, 860, 867,
868, 871, 872, 889, 892, 896, 897, 899, 904, 915, 936, 951,
960, 970, 986, 990, 1000

<223> n = A,T,C or G

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ccctttgccc tgattcnent gggccttttc tcttttccct tttgggttgt ttaaattccc 540
aatgtcccn gaacctctc cntnctgccc aaaacctacc taaattnctc nctangnntt 600
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nctgggggaa acccttttaa tttcccctt ggcgggccc cctttttcc ccccttnga 780
aggcagngg ttcttccga acttccaatt ncaacagccn tgcccattgn tgaaacctt 840
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<210> 6
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<212> DNA
<213> Homo sapiens

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<220>
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286, 287, 288, 289, 290, 291, 293, 295, 296, 300, 302, 303,
309, 313, 314, 315, 316, 317, 318, 319, 320, 322, 323
<223> n = A,T,C or G

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<221> misc_feature
<222> 326, 327, 331, 332, 339, 342, 343, 344, 346, 349, 352, 353,
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401, 402, 405, 406, 408, 409, 410, 412, 413, 414, 415
<223> n = A,T,C or G

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<221> misc_feature
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<223> n = A,T,C or G

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<221> misc_feature
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<223> n = A,T,C or G

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<221> misc_feature
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 696, 700, 701, 702, 704, 705, 706, 708, 710, 711, 712, 713,
 715, 719, 722, 725, 727, 731, 734, 735, 737, 739, 742
 <223> n = A,T,C or G

<221> misc_feature
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 800, 803, 810, 812, 824, 828, 832, 836, 839, 843, 844, 846,
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<221> misc_feature
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 930, 932, 935, 940
 <223> n = A,T,C or G

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 cnnccnctn ncccnennnt tcnctncnn tntccnncnn nntcnnncnn cnnnnctnn 420
 ccnntacntc ntnnnnnnnt cctctctnn cctcnnccnt cncctncnt tntctcctn 480
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 ccnccnttc cttncnctn nntntcnnn cncntcnc nttnctcct nntcccnnc 660
 tcnnttcnc cnnntccnc cccnccnt ctctcncn nntnnnttn nnnctccnc 720
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 tcnctntcn cctccttn ctntctctn tntccttccc ctncctnct cttcncnc 840
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<210> 7
 <211> 1086
 <212> DNA
 <213> Homo sapiens

<220>
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 890, 904, 913, 920, 926, 937, 940, 953, 957, 960, 985, 993,
 994, 1000, 1012, 1044, 1060, 1063, 1080, 1081
 <223> n = A,T,C or G

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 agaaaaattc ttctgccttg agatgctgtt aatctgtaac cctagcccca accctgtgct 180
 cacagagaca tgtgctgtgt tgactcaagg ttcaatggat ttagggctat gctttgttaa 240
 aaaagtgtt gaagataata tgcttgtaa agtcatcac cattctctaa tctcaagtac 300

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gactgtcccc cagcccgaca tccccagcc cgacatcccc cagcccgaca cccgaaaagg 480
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tctacttact gagaatagga gaaaacatcc ttagggctgg aggtgagaca ccctggcggc 660
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ttaacttttt atganacaaa aactttgttc ncttttctcg cgaacctctc cccctattan 780
cctattggcc tgcccatccc ctccccaaan ggtgaaaana tgttcntaaa tncgagggaa 840
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gccccctcaa attataacct ttccnaaaca aannngttcn aaggtgggtt gnttccgggtg 1020
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ntcccc 1086

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<210> 8

<211> 1177

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1, 4, 20, 21, 31, 278, 314, 332, 359, 371, 373, 375, 376,
524, 537, 556, 557, 579, 583, 590, 591, 598, 623, 625, 648,
700, 703, 719, 738, 742, 746, 749, 751, 752, 800, 808, 820,
821, 824, 835, 838, 845, 851, 856, 864, 865, 879, 888

<223> n = A,T,C or G

<221> misc_feature

<222> 911, 920, 926, 935, 945, 950, 952, 956, 969, 972, 977, 981,
992, 999, 1023, 1024, 1032, 1038, 1039, 1040, 1062, 1069,
1075, 1084, 1089, 1104, 1119, 1123, 1131, 1143, 1146, 1152,
1165, 1169, 1172, 1176

<223> n = A,T,C or G

<400> 8

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atggtgttta aatocagcta cactacttcc tgactcaaac tccactattc ctgttcatga 180
ctgtcaggaa ctgttggaaa ctactgaaac tggccgacct gatcttcaaa atgtgcccct 240
aggaaagggtg gatgccaccg tgttcacaga cagtaccncc ttccctcgaga agggactacg 300
aggggcccgtt gcanctgtta ccaaggagac tnatgtgttg tgggctcagg ctttaccanc 360
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aaaagccnc antccntcc naaatttgca cngaaaggna aggaatttaa cttttatttt 1020
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<210> 9
 <211> 1146
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
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 842, 846, 860, 866, 886, 889, 911, 939, 945, 955, 960, 982,
 999, 1002, 1005, 1009, 1010, 1033, 1047, 1049, 1055, 1058,
 1069, 1074, 1079, 1081, 1104, 1105, 1111, 1116, 1118
 <223> n = A,T,C or G

<221> misc_feature
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 agactccatc agtgagggtc aagcctgggg cttttcagag aaggaggat tatgggtttt 180
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 atagan 1146

<210> 10
 <211> 545
 <212> DNA
 <213> Homo sapiens

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 cagatctggc tgtggaaagg agactgtggg cagcaagttt agaggcgtga ctgaaagtca 240
 cactgcatct tgagctgctg aatcagcttt ctggttacca cgggcaacag ccgtgttttc 300
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<211> 196
<212> DNA
<213> Homo sapiens
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<211> 388
<212> DNA
<213> Homo sapiens
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aataaaataa ggaaaacgat gtctgtgtat agccaagtca gntatcctaa aaggagatac 180
taagtgcata taaatatcag aatgtaaaac ctgggaacca ggttcccagc ctgggattaa 240
actgacagca agaagactga acagtactac tgtgaaaagc ccgaagnngc aatatgttca 300
ctctaccgtt gaaggatggc tgggagaatg aatgctctgt cccccagtcc caagctcact 360
tactatacct cctttatagc ctaggaga                                     388
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<212> DNA
<213> Homo sapiens
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<212> DNA
<213> Homo sapiens
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<221> misc_feature
 <222> 435, 441, 451, 456, 462, 479, 488, 489, 509, 568
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 aaaatcatat ttcataatatt acgctcgagg gttttttaccg gttccctttt acactcctta 180
 aaacagtttt taagtcgttt ggaacaagat attttttctt tcctggcagc ttttaacatt 240
 atagcaaatt tgtgtctggg ggactgctgg tcaactgtttc tcacagttgc aaatcaaggc 300
 atttgcaacc aagaaaaaaa aatttttttg ttttatttga aactggaccg gataaacggg 360
 gtttgagcgc gctgctgtat atagttttaa atgggtttatt gcacctcctt aagttgcact 420
 tatgtggggg ggggnttttg natagaaagt ntttantcac anagtcacag ggacttttnt 480
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 gaggcctttc tcttagaggg gggaactnct a 571

<210> 15
 <211> 548
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
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 <223> n = A,T,C or G

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 tccccacccc gcaactgaaac ttcaccttct aactgtctac ctaaccaaat tctacccttc 180
 aagtcttttg tgcgtgctca ctactctttt tttttttttt tttnttttgg agatggagtc 240
 tggctgtgca gccaggggt ggagtacaat ggcacaaact cagctcaactg naacctccgc 300
 ctcccagggt catgagattc tctgnttca gccttcccag tagctgggac tacagggtgtg 360
 catcaccatg cctggntaat cttttttngt tttngggtag agatgggggt tttacatgtt 420
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 aactacta 548

<210> 16
 <211> 638
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 471, 488
 <223> n = A,T,C or G

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 gctggtaagc actctgacta cacgaaattg ttcagatgtg atggatttat gacagttgat 180
 ctttggaaga gattattaag tgattatttt aaagggaatc cattaattcc agaatatctt 240
 ggttttagctc aagatgatat agaaatagaa cagaaagaga ctacaaatga agatgtatca 300

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ccaactgata ttgaagagcc tatagtagaa aatgaattag ctgcatttat tagccttaca 360
catagcgatt ttcctgatga atcttatatt cagccatcga catagcatta cctgatgggc 420
aaccttacga ataatagaaa ctgggtgcgg ggctattgat gaattcatcc ncagtaaatt 480
tgatataacg aaaatataac tcgattgcat ttggatgatg gaatactaaa tctggcaaaa 540
gtaacttttg agctactagt aacctctctt tttgagatgc aaaatcttct tttaggggtt 600
cttattctct actttacgga tattggagca taacggga 638

```

```

<210> 17
<211> 286
<212> DNA
<213> Homo sapiens

```

```

<400> 17
actgatggat gtcgccggag gcgaggggcc ttatctgatg ctcggtgcc tgttcgtgat 60
gtgcgcggcg attgggctgt ttatctcaaa caccgccacg gcggtgctga tggcgccctat 120
tgccttagcg gcggcgaagt caatgggcgt ctacccctat ccttttgcca tgggtgggtggc 180
gatggcggct tcggcggcgt ttatgacccc ggtctcctcg ccggttaaca ccctgggtgct 240
tggccctggc aagtactcat ttagcgattt tgtcaaaaata ggcgtg 286

```

```

<210> 18
<211> 262
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 184, 234, 240
<223> n = A,T,C or G

```

```

<400> 18
tcggtcatag cagcccttc ttctcaattt catctgtcac taccctgggtg tagtatctca 60
tagccttaca tttttatagc ctctccctg gtctgtcttt tgattttcct gcctgtaatc 120
catatcacac ataactgcaa gtaaacattt ctaaagtgtg gttatgctca tgtcactcct 180
gtgncaagaa atagtttcca ttaccgtctt aataaaaattc ggatttggtc ttttctattn 240
tcactcttca cctatgaccg aa 262

```

```

<210> 19
<211> 261
<212> DNA
<213> Homo sapiens

```

```

<400> 19
tcggtcatag caaagccagt ggtttgagct ctctactgtg taaactccta aaccaaggcc 60
atztatgata aatgggtggc ggatttttat tataaacatg taccatgca aatttcctat 120
aactctgaga tatattcttc tacattttaa caataaaaat aatctatttt taaaagccta 180
atttgcgtag ttaggtaaga gtgtttaatg agagggtata aggtataaat caccagtcaa 240
cgtttctctg cctatgaccg a 261

```

```

<210> 20
<211> 294
<212> DNA
<213> Homo sapiens

```

```

<220>

```

<221> misc_feature
 <222> 194, 274, 283, 294
 <223> n = A,T,C or G

<400> 20
 tacaacgagg cgacgtcggg aaaatcggac atgaagccac cgctgggtctt ttcgtccgag 60
 cgataggcgc cggccagcca gcggaacggg tgcgcggatg gcgaagcgag ccggagttct 120
 tcggactgag tatgaatctt gttgtgaaaa tactcgccgc cttcgttcga cgacgtcgcg 180
 tcgaaatctt cganctcctt acgatcgaag tcttcgtggg cgacgatcgc ggtcagttcc 240
 gccccaccga aatcatgggt gagccggatg ctgnccccga agnccctcgtt tgtn 294

<210> 21
 <211> 208
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 116, 132, 140, 160, 164, 191, 197, 199
 <223> n = A,T,C or G

<400> 21
 ttggtaaagg gcatggacgc agacgcctga cgtttggtcg aaaatctttc attgattcgt 60
 atcaatgaat aggaaaattc ccaaagaggg aatgtcctgt tgctcgccag tttttntgtt 120
 gttctcatgg anaaggcaan gagctcttca gactattggn attntcgttc ggtcttctgc 180
 caactagtcg ncttgcnang atcttcat 208

<210> 22
 <211> 287
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 1, 4, 25, 121, 168, 207, 212
 <223> n = A,T,C or G

<400> 22
 nccnttgagc tgagtgattg agatntgtaa tggttgtaag ggtgattcag gcggattagg 60
 gtggcggggc acccggcagt ggggtctccc acaggccagc aggatttggg gcaggtagcg 120
 ngtgcgcacg gctcgactat atgctatggc aggcgagccg tggaaggngg atcaggtcac 180
 ggcgctggag ctttccacgg tccatgnatt gngatggctg ttctaggcgg ctgttgccaa 240
 gcgtgatggt acgctggctg gagcattgat ttctggtgcc aaggtgg 287

<210> 23
 <211> 204
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 40, 121, 131, 162, 184, 197
 <223> n = A,T,C or G

<400> 23
 ttgggtaaaag ggagcaagga gaaggcatgg agaggctcan gctggtcctg gcctacgact 60
 gggccaagct gtcgccgggg atgggtggaga actgaagcgg gacctcctcg aggtcctccg 120
 ncgttacttc nccgtccagg aggaggggtct ttccgtggtc tnggaggagc ggggggagaa 180
 gatnctcctc atggtcnaca tccc 204

<210> 24
 <211> 264
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 171, 206
 <223> n = A,T,C or G

<400> 24
 tggattgggc aggagcgggt agagtggcac cattgagggg atattcaaaa atattatttt 60
 gtcctaaatg atagtgtctg agtttttctt tgacccatga gttatattgg agttttatttt 120
 ttaactttcc aatcgcatgg acatgttaga cttattttct gttaatgatt nctattttta 180
 ttaaattgga tttgagaaat tggttnttat tataatcaatt tttggatatt gttgagtttg 240
 acattatagc ttagtatgtg acca 264

<210> 25
 <211> 376
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 103, 111, 192, 196, 199, 220, 224, 230, 251, 268, 283, 317,
 352, 370, 374
 <223> n = A,T,C or G

<400> 25
 ttacaacgag gggaaactcc gtctctacaa aaattaaaaa attagccagg tgtgggtgggtg 60
 tgcacccgca atcccagcta cttgggaggt tgagacacaa gantcaccta natgtggggag 120
 gtcaagggttg catgagtcac gattgtgccca ctgcactcca gcctgggtga cagaccgaga 180
 coctgcctca anaganaang aataggaagt tcagaaatcn tggntgtggn gccacgcaat 240
 ctgcacatcat ncaacccctg caggcaangc tgatgcagcc tangttcaag agctgctgtt 300
 totggaggca gcagttnggg cttccatcca gtatcacggc cacactcgca cnagccatct 360
 gtcctccgtn tgnac 376

<210> 26
 <211> 372
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 231, 312, 340
 <223> n = A,T,C or G

<400> 26

```

ttacaacgag gggaaactcc gtctctacaa aaattaaata attagccagg tgtgggtggtg 60
tgcacctgta atcccagcta cttgggcggc tgagacacaa gaaccaccta aatgtgggag 120
ggtcaagggt gcatgagtca tgatcgcgcc actgcactcc agcctgggtg acagactgag 180
accctgcctc aaaagaaaaa gaataggaag ttcagaaacc ctgggtgtgg ngcccagcaa 240
tctgcattta aacaatccct gcaggcaatg ctgatgcagc ctaagttcaa gagctgctgt 300
tctggaggca gnagtaaggg cttccatcca gcatcacggn caacactgca aaagcacctg 360
tcctcgttgg ta 372

```

```

<210> 27
<211> 477
<212> DNA
<213> Homo sapiens

```

```

<400> 27
ttctgtccac atctacaagt tttatttatt ttgtgggttt tcagggtgac taagtttttc 60
cctacattga aaagagaagt tgctaaaagg tgcacaggaa atcatttttt taagtgaata 120
tgataatatg ggtccgtgct taatacaact gagacatatt tgttctctgt ttttttagag 180
tcacctctta agtccaatc ccacaatggt gaaaaaaaaa tagaaagtat ttgttctacc 240
tttaaggaga ctgcagggat tctccttgaa aacggagtat ggaatcaatc ttaaataaat 300
atgaaattgg ttggtcttct gggataagaa attcccaact cagtgtgctg aaattcacct 360
gacttttttt gggaaaaaat agtcgaaaat gtcaatttgg tccataaaat acatgttact 420
attaaaagat atttaaagac aaattctttc agagctctaa gattgggtgtg gacagaa 477

```

```

<210> 28
<211> 438
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 4, 16, 30, 255, 413
<223> n = A,T,C or G

```

```

<400> 28
tctncaacct cttgantgtc aaaaaccttn taggctatct ctaaaagctg actggtattc 60
attccagcaa aatccctcta gtttttggag tttcctttta ctatctggg ctgcctgagc 120
cacaaatgcc aaattaagag catggctatt ttccggggct gacagggtcaa aaggggtgta 180
aatccgataa gctcctgga ggtgctctaa aaacactcct ggtgactcat catgccctg 240
gacgacttca atcgnccttag acaagtttat aggtttctgg gcagctccct gaataccac 300
gaggagatac cgggtgaaat cgtcaaaagt tctccctcca cttgagaaat ttgggtccca 360
attagggtccc aattgggtct ctaatcacta ttctcttagc ttctctctcc ggnctattgg 420
ttgatgtgag gttgaaga 438

```

```

<210> 29
<211> 620
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 391, 481, 483, 490, 497, 510, 527, 532, 540, 545, 593, 612
<223> n = A,T,C or G

```

```

<400> 29

```

```

aagagggtac cagccccaag ccttgacaac ttccataggg tgtcaagcct gtgggtgcac 60
agaagtcaaa aattgagttt tgggatcctc agcctagatt tcagaggata taaagaaaca 120
cctaacacct agatattcag acaaaagttt actacaggga tgaagctttc acgaaaacc 180
tctactagga aagtacagaa gagaaatgtg ggtttggagc ccccaaacag aatccccctct 240
agaacactgc ctaatgaaac tgtgagaaga tggccactgt catccagaca ccagaatgat 300
agaccaccca aaaacttatg ccatattgcc tataaaacct acagacactc aatgccagcc 360
ccatgaaaaa aaaactgaga agaagactgt nccctacaat gccaccggag cagaactgcc 420
ccaggccatg gaagcacagc tcttatatca atgtgacctg gatgttgaga catggaatcc 480
nangaaatcn ttttaanact tccacggttn aatgactgcc ctattanatt cngaacttan 540
atcnggcct gtgacctctt tgctttggcc attccccctt tttggaatgg ctnttttttt 600
cccatgcctg tncctcttta

```

<210> 30

<211> 100

<212> DNA

<213> Homo sapiens

<400> 30

```

ttacaacgag ggggtcaatg tcataaatgt cacaataaaa caatctcttc tttttttttt 60
tttttttttt tttttttttt tttttttttt tttttttttt

```

100

<210> 31

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 626, 652, 662, 715, 736

<223> n = A,T,C or G

<400> 31

```

tagtctatgc gccggacaga gcagaattaa attggaagtt gccctccgga ctttctaccc 60
acactcttcc tgaaaagaga aagaaaagag gcaggaaaga ggtaggatt tcattttcaa 120
gagtcagcta attaggagag cagagtttag acagcagtag gcaccccatg atacaaacca 180
tggacaaagt ccctgttttag taactgccag acatgatcct gctcagggtt tgaaatctct 240
ctgcccataa aagatggaga gcaggagtgc catccacatc aacacgtgtc caagaaagag 300
tctcaggagag acaagggtat caaaaaacaa gattcttaat gggaaggaaa tcaaaccaaa 360
aaattagatt tttctctaca tatatataat atacagatat ttaacacatt attccagagg 420
tggctccagt ccttggggct tgagagatgg tgaaaacttt tgttccacat taacttctgc 480
totcaaattc tgaagtatat cagaatggga caggcaatgt tttgctccac actggggcac 540
agaccccaat ggttctgtgc ccgaagaaga gaagcccgaag agacatgaag gatgcttaag 600
ggggggttggg aaagccaaat tgggtantatc ttttctcctt gctgtgttc cngaagtctc 660
cnotgaagga attcttaaaa ccctttgtga ggaaatgcc ccttaccatg acaantggtc 720
ccattgcttt taggngatg gaaacaccaa gggttttgat cc

```

762

<210> 32

<211> 276

<212> DNA

<213> Homo sapiens

<400> 32

```

tagtctatgc gtgtattaac ctccccctccc tcagtaacaa ccaaagagge aggagctgtt 60
attaccaacc caattttaca gatgcatcaa taatgacaga gaagtgaagt gacttgcgca 120

```

```

cacaaccagt aaattggcag agtcagattt gaatccatgg agtctgggtct gcactttcaa 180
tcaccgaata cccctttctaa gaaacgtgtg ctgaatgagt gcatggataa atcagtgtct 240
actcaacatc tttgcctaga tatcccgcat agacta 276

```

```

<210> 33
<211> 477
<212> DNA
<213> Homo sapiens

```

```

<400> 33
tagtagttgc caaatatttg aaaatttacc cagaagtgat tgaaaacttt ttggaaacaa 60
aaacaaataa agccaaaagg taaaataaaa atatctttgc actctcgtaa ttacctatcc 120
ataacttttt caccgtaagc tctcctgctt gttagtgtag tgtgggtata ttaacttttt 180
tagttattat tttttattca cttttccact agaaagtcac tattgattta gcacacatgt 240
tgatctcatt toattttttc tttttatagg caaaatttga tgctatgcaa caaaaatact 300
caagcccatt atcttttttc cccccgaaat ctgaaaattg caggggacag agggaagtta 360
tcccattaaa aaattgtaaa tatgttcagt ttatgtttta aaatgcacaa aacataagaa 420
aattgtgttt acttgagctg ctgattgtaa gcagttttat ctcaggggca actacta 477

```

```

<210> 34
<211> 631
<212> DNA
<213> Homo sapiens

```

```

<400> 34
tagtagttgc caattcagat gatcagaaat gctgctttcc tcagcattgt cttgttaaac 60
cgcatgccat ttggaacttt ggcagtgaga agccaaaagg aagaggtgaa tgacatatat 120
atatatatat attcaatgaa agtaaaatgt atatgctcat atactttcta gttatcagaa 180
tgagttaagc tttatgccat tgggctgctg catattttta tcagaagata aaagaaaatc 240
tgggcatttt tagaatgtga tacatgtttt tttaaaactg ttaaataatta tttcgatatt 300
tgtctaagaa ccggaatgtt cttaaaattt actaaaacag tattgtttga ggaagagaaa 360
actgtactgt ttgccattat tacagtcgta caagtgcacg tcaagtcacc cactctctca 420
ggcatcagta tccacctcat agctttacac attttgacgg ggaatattgc agcatcctca 480
ggcctgacat ctgggaaagg ctcagatcca cctactgctc cttgctcggt gatttgtttt 540
aaaatattgt gcttggtgtc acttttaagc cacagccctg cctaaaagcc agcagagaac 600
agaacccgca ccattctata ggcaactact a 631

```

```

<210> 35
<211> 578
<212> DNA
<213> Homo sapiens

```

```

<400> 35
tagtagttgc catcccatat tacagaaggc tctgtataca tgacttattt ggaagtgatc 60
tgttttctct ccaaaccat ttatcgtaat ttcaccagtc ttggatcaat cttggtttcc 120
actgatacca tgaaacctac ttggagcaga cattgcacag ttttctgtgg taaaaactaa 180
aggtttattt gctaagctgt catcttatgc ttagtatttt ttttttacag tggggaattg 240
ctgagattac attttgttat tcattagata ctttgggata acttgacact gtcttctttt 300
tttcgctttt aattgctatc atcatgcttt tgaaacaaga acacattagt cctcaagtat 360
tacataagct tgcttgttac gcttggtggt ttaaaggact atctttggcc tcaggttcac 420
aagaatgggc aaagtgtttc cttatgttct gtagttctca ataaaagatt gccaggggcc 480
gggtactgtg gctcgactg taatcccagc actttgggaa gctgaggctg gcgcatcatg 540
ttagggcagc tggttcgaaac cagcctgggc aactacta 578

```

<210> 36
 <211> 583
 <212> DNA
 <213> Homo sapiens

<400> 36
 tagtagttgc ctgtaatccc agcaactcag gaggctgggg caggagaatc agttgaacct 60
 gggaggcgaga agttgtaatt agcaaagatc gcaccattgc acttcagcct gggcaacaag 120
 agtgagattc catctcaaaa acaaaaaaaaa gaaaaagaaa agaaaaggaa aaaacgtata 180
 aaccagcca aaacaaaatg atcattcttt taataagcaa gactaattta atgtgtttat 240
 ttaatcaaag cagttgaatc ttctgagtta ttggtgaaaa taccatgta gtttaatttag 300
 ggttcttact tgggtgaacg tttgatgttc acagggttata aaatgggtta caaggaaaat 360
 gatgcataaa gaatcttata aactactaaa aataaataaa atataaatgg atagggtgcta 420
 tggatggagt ttttggtgtaa tttaaaatct tgaagtcatt ttggatgctc attgggtgtc 480
 tggtaatttc cattaggaaa aggttatgat atgggggaaac tgtttctgga aattgcggaa 540
 tgtttctcat ctgtaaaatg ctagtatctc agggcaacta cta 583

<210> 37
 <211> 716
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> 15, 669, 673, 678, 686, 704
 <223> n = A,T,C or G

<400> 37
 gatctactag toatntggat tctatccatg gcagctaagc ctttctgaat ggattctact 60
 gctttcttgt tctttaatcc agacccttat atatgtttat gtccacaggc agggcaatgt 120
 ttagtgaaaa caattctaaa ttttttattt tgcattttca tgctaatttc cgtcacactc 180
 cagcaggctt cctgggagaa taaggagaaa tacagctaaa gacattgtcc ctgcttactt 240
 acagcctaatt ggtatgcaaa accacttcaa taaagtaaca ggaaaagtac taaccaggta 300
 gaatggacca aaactgatat agaaaaatca gaggaagaga ggaacaaata tttactgagt 360
 cctagaatgt acaaggcttt ttaattacat attttatgta aggcctgcaa aaaacagggtg 420
 agtaatcaac atttgtccca ttttacatat aaggaaactg aagcttaaat tgaataattt 480
 aatgcataga ttttatagtt agaccatgtt cagggtcccta tgttatactt actagctgta 540
 tgaatatgag aaaataattt tgttattttc ttggcatcag tatttttcac tgcaaaaataa 600
 agctaaagtt atttagcaaa cagtcagcat agtgcctgat acatagtagg tgctccaaac 660
 atgattacnc tantattingg tattanaaaa atccaatata ggcntggata aaaccg 716

<210> 38
 <211> 688
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> 260
 <223> n = A,T,C or G

<400> 38
 ttctgtccac atatcatccc actttaattg ttaatcagca aaactttcaa tgaaaaatca 60
 tocattttaa ccaggatcac accaggaaac tgaaggtgta tttttttta ccttaaaaaa 120


```

<400> 41
taagagggta catcgggtaa gaacgtaggc acatctagag cttagagaag tctggggtag 60
gaaaaaaatc taagtattta taagggtata ggtaacattt aaaagtaggg ctactgtaca 120
ttatttagaa agaacacata cggagagata agggcaaagg actaagacca gaggaacact 180
aatatttagt gatcacttcc attcttggtt aaaatagtaa cttttaagtt agcttcaagg 240
aagatttttg gccatgatta gttgtcaaaa gtttagttctc ttgggtttat attactaatt 300
ttgttttaag atccttggtt gtgctttaat aaagtcatgt tatatcaaac gctctaaaac 360
attgtagcat gttaaatgtc acaatatact taccatttgt tgtatatggc tgtaccctct 420
cta 423

```

```

<210> 42
<211> 527
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 470, 475, 515, 522
<223> n = A,T,C or G

```

```

<400> 42
tctcctaggc taatgtgtgt gtttctgtaa aagtaaaaag ttaaaaattt taaaaataga 60
aaaaagctta tagaataaga atatgaagaa agaaaatatt ttgtacatt tgcacaatga 120
gtttatgttt taagctaagt gttattacaa aagagccaaa aagggtttta aaattaaaac 180
gtttgtaaaag ttacagtacc cttatgttaa ttataattg aagaaagaaa aacttttttt 240
tataaatgta gtgtagccta agcatacagt atttataaag tctggcagtg ttcaataatg 300
tcctaggcct tcacattcac tctactgactc acccagagca acttccagtc ctgtaagctc 360
cattcgtggg aagtgcccta tacagggtgca ccatttattt tacagtattt ttactgtacc 420
ttctctatgt ttccatatgt ttcgatatac aaataccact ggttactatn gcccnacagg 480
taattccagt aacacggcct gtatacgtct ggtancccta gngaaga 527

```

```

<210> 43
<211> 331
<212> DNA
<213> Homo sapiens

```

```

<400> 43
tcttcaacct cgtaggacaa ctctcatatg cctgggcact atttttaggt tactaccttg 60
gctgcccttc ttttaagaaaa aaaaaagaag aaaaaagaac ttttccacaa gtttctcttc 120
ctctagtgtg aaaattagag aaatcatgtt tttaattttg tggtatttca gatcacaat 180
tcaaacactt gtaaacatta agcttctgtt caatcccctg ggaagaggat tcattctgat 240
atttacggtt caaaagaagt tgtaatatgt tgcttgggaa acagagaacc agttattaac 300
ttcctactac tattatataa taaataataa c 331

```

```

<210> 44
<211> 592
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 473
<223> n = A,T,C or G

```

```

<400> 44
ggcttagtag ttgccaggca aaatarcgtt gattctcctc aggagccacc cccaacaccc 60
ctgtttgctt ctagacctat acctagacta aagtcccagc agacccttag aggtgagggt 120
cagagtgacc cttgaggaga tgtgctacac tagaaaagaa ctgcttgagt tttctaattt 180
atataagcag aaatctggag aagagtcata ggaatggata ttaaggggtg gagataatgg 240
cggaaggaat atagagttgg atcaggctgg acttattgat ttgaaccac taagtagaga 300
ttctgctttt gatgttgcag ctcaggaggat taaaaaagggt tttaatgggt ctaatagttt 360
atttgcttgg ttagctgaaa tatggataaa agatggccca ctgtgagcaa gctggaaatg 420
cctgatctct ctcagtttaa tgtagaggaa gggatccaaa agtttaggga ganttgatg 480
ctggraktgg attggtcact ttgrgaccta cccwtcccag ctgggagggt ccagaagata 540
cacccttgac caacgctttg cgaaatggat ttgtgatggc ggcaactact aa 592

```

```

<210> 45
<211> 567
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 522, 561, 566
<223> n = A,T,C or G

```

```

<400> 45
ggcttagtag ttgccattgc gagtgcttgc tcaacgagcg ttgaacatgg cggattgtct 60
agattcaacg gatttgagtt ttaccagcaa agcgaaccaa gcgcggccca gagaattatg 120
ggttggttgg ctttgaaaag atggaaatcc ttaggccta gtcagaaaag ccttcttgca 180
gaacagttgg ttctcgggcg aacgctcatc aagatgcca ttggaaaggc tagcgtgtat 240
ttgggagagc ctgatagcgt gtcttctgat gatgtttgtg cttggacagt gacaaaagat 300
atgcaaagca agtccgaact agacgtcaag cttcgtgagc aaattattgt agactoctac 360
ttatactgtg aggaatgata gccaagggtg gggactttaa gactaagggt gtttgacttt 420
gcgcgatga tcccaggcag aaagamctga tcgctagttt tatacgggca actactaagc 480
cgaattccag cacactggcg gccgttacta attggatccg anctcggtag cagcttgatg 540
catascttga gttwtctata ntgtcnc 567

```

```

<210> 46
<211> 908
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 21, 23, 24, 27, 29, 34
<223> n = A,T,C or G

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<400> 46
gagcgaaaga ccgagggcag ngnttangng cgangaagcg gagagggcca aaaagcaacc 60
gctttccccc gggggtgccg attcatthaag gcagggtggag gacagggttc ccgatggaag 120
gcggcagggg cgcaagcaat taatgtgagt aggccattca ttagcaccgc ggcttaacat 180
ttaagcttcg ggttggtatg tgggtgggaat tgtgagcgga taacaatttc acacaggaaa 240
cagctatgac catgattacg ccaagctatt taggtgacat tatagaataa ctcaagttat 300
gcatcaagct tggtagcgag ttcggatcca ctagtaacgg ccgccagtgt gtggaattcg 360
gcttagtagt tgccgaccat ggagtgtctac ctaggctaga atacctgagy tctcccttag 420
cctcactcac attaaattgt atcttttcta cattagatgt cctcagcgcc ttatttctgc 480
tggacwatcg ataaattaat cctgatagga tgatagcagc agattaatta ctgagagtat 540

```

gttaatgtgt catccctcct atataacgta tttgcatttt aatggagcaa ttctggagat 600
aatccctgaa ggcaaaggaa tgaatcttga ggggtagaaa gccagaatca gtgtccagct 660
gcagttgtgg gagaagggtga tattatgtat gtctcagaag tgacaccata tgggcaacta 720
ctaagcccga attccagcac actggcgggc gttactaatg gatccgagct cggtagcaag 780
cttgatgcat agcttgagta tctatagtgt cactaaatag cctggcggtta tcatgggtcat 840
agctgtttcc tgtgtgaaat tggttatccgc tcccaattcc ccccaccata cgagccggaa 900
cataaagt 908

<210> 47

<211> 480

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 408, 461

<223> n = A,T,C or G

<400> 47

tgccaacaag gaaagtttta aatttcccct tgaggattct tggatgatcat caaattcagt 60
ggtttttaag gttgttttct gtcaaataac tctaacttta agccaaacag tatatggaag 120
cacagataka atattacaca gataaaagag gagttgatct aaagtaraga tagttggggg 180
ctttaatttc tggaacctag gtctcccat cttcttctgt gctgaggaac ttcttggaag 240
cggggattct aaagtctttt ggaagacagt ttgaaaacca ccatgttgtt ctcagtacct 300
ttatttttaa aaagtaggtg aacattttga gagagaaaag ggcttggttg agatgaagtc 360
ccccccccc cttttttttt ttttagctga aatagatacc ctatgttnaa rgaarggatt 420
attattttacc atgccaytar scacatgctc tttgatgggc nyctccstac cctccttaag 480

<210> 48

<211> 591

<212> DNA

<213> Homo sapiens

<400> 48

aagaggggtac cgagtggaaat ttccgcttca ctagtctggt gtggctagtc ggtttcgtgg 60
tggccaacat tacgaacttc caactcaacc gttcttggtg gttcaagcgg gagtaccggc 120
gaggatggtg gcgtgaattc tggcctttct ttgccgtggg atcggtagcc gccatcatcg 180
gtatgtttat caagatcttc tttactaacc cgacctctcc gatttacctg cccgagccgt 240
ggtttaacga ggggaggggg atccagtcac gcgagtactg gtcccagatc ttccgccatcg 300
tcgtgacaat gcctatcaac ttctgtctca ataagttgtg gaccttccga acggtgaagc 360
actccgaaaa cgctcgggtg ctgctgtgct gtgactccca aaatcttgat aacaacaagg 420
taaccgaatc gcgctaagga accccggcat ctcgggtact ctgcatatgc gtaccocctta 480
agccgaattc cagcacactg gcggccgtta ctaattggat ccgaactccg taaccaagcc 540
tgatgcgtaa cttgagttat tctatagtgt ccctaaaata acctggcggt a 591

<210> 49

<211> 454

<212> DNA

<213> Homo sapiens

<400> 49

aagaggggtac ctgccttgaa atttaaattgt ctaaggaaar tgggagatga ttaagagttg 60
gtgtggcyta gtcacaccaa aatgtattta ttacatcctg ctcccttcta gttgacagga 120

<220>
 <221> misc_feature
 <222> 135, 143, 179
 <223> n = A,T,C or G

<400> 53
 ttccgggtgat gcctcctcag gctacagtga agactggatt acagaaaggt gccagcgcaga 60
 ttccagattc ctgtaaacct ctaaagaaaa ggagtcgcgc ctcaactgat gtagaaatga 120
 ctagtccagc atacngagac acntctgact ccgattctag aggactgagt gacctgcan 179

<210> 54
 <211> 112
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 31, 49, 54, 55, 75, 91, 107
 <223> n = A,T,C or G

<400> 54
 ttccgggtgat gcctcctcag gctacatcat natagaagca aagtagaana atcnngtttg 60
 tgcattttcc cacanacaaa attcaaata ntggaagaaa ttggganagt at 112

<210> 55
 <211> 225
 <212> DNA
 <213> Homo sapiens

<400> 55
 tgagcttccg cttctgacaa ctcaatagat aatcaaagga caactttaac agggattcac 60
 aaaggagtat atccaaatgc caataaacat ataaaaagga attcagcttc atcatcatca 120
 gaagwatgca aattaaaacc ataataagaa accactatgt ccactagaa tagataaaat 180
 cttaaaagac tggtaaaacc aagtgttggg aaggcaagag gagca 225

<210> 56
 <211> 175
 <212> DNA
 <213> Homo sapiens

<400> 56
 gctcctcttg ccttaccaac acattctcaa aaacctgtta gagtcctaag cattctcctg 60
 ttagtattgg gattttaccc ctgtcctata aagatgttat gtacaaaaa tgaagtggag 120
 ggccataccc tgaggggagg gagggatctc tagtgttgtc agaagcggaa gctca 175

<210> 57
 <211> 223
 <212> DNA
 <213> Homo sapiens

<400> 57
 agccatttac caccatgga tgaatggatt ttgtaattct agctgttgta ttttgtgaat 60
 ttgttaattt tgttgttttt ctgtgaaaca catacattgg atatgggagg taaaggagtg 120

tcccagttgc tcttggtcac tccctttata gccattactg tcttgtttct tgtaactcag 180
gttagggtttt ggtctctctt gctccactgc aaaaaaaaaa aaa 223

<210> 58
<211> 211
<212> DNA
<213> Homo sapiens

<400> 58
gttcgaaggt gaacgtgtag gtagcggatc tcacaactgg ggaactgtca aagacgaatt 60
aactgacttg gatcaatcaa atgtgactga gaaacacct gaaggagaag aacatcatcc 120
agtggcagac actgaaaata aggagaatga agttgaagag gtaaaagagg aggggtccaaa 180
agagatgact ttggatgggt ggtaaatggc t 211

<210> 59
<211> 208
<212> DNA
<213> Homo sapiens

<400> 59
gctcctcttg ccttaccac tttgcaccca tcatcaacca tgtggccagg tttgcagccc 60
agggtgcaca tcaggggact gcctcgcaat acttcatgct gttgctgctg actgatggtg 120
ctgtgacgga tgtggaagcc acacgtgagg ctgtggtgcg tgctcgaac ctgccccatgt 180
cagtgatcat tatgggtggt aaatggct 208

<210> 60
<211> 171
<212> DNA
<213> Homo sapiens

<400> 60
agccatttac caccataact aaattctagt tcaaactcca acttcttcca taaaacatct 60
aaccactgac accagttggc aatagcttct tcttcttta acctcttaga gtatttatgg 120
tcaatgccac acatttctgc aactgaataa agttggtgaag gcaagaggag c 171

<210> 61
<211> 134
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 37, 70, 80, 86, 88, 97, 117, 123, 131
<223> n = A,T,C or G

<400> 61
cggtgatgc ctctcaggg tttggtgtgt ccaactnact cactggcctc ttctccagca 60
actggtgaan atgtctcan gaaaancncc acacgngct cagggtgggg tgggaancat 120
canaatcatc nggc 134

<210> 62
<211> 145
<212> DNA
<213> Homo sapiens

102000-000000

<400> 62
agaggggtaca tatgcaacag tatataaagg aagaagtgca ctgagaggaa ctccatcaag 60
gccatttaat caataagtga tagagtcaag gctcaacca ggtgtgacgg attccaggtc 120
ccaagctcct tactggtacc ctctt 145

<210> 63
<211> 297
<212> DNA
<213> Homo sapiens

<400> 63
tgcactgaga ggaattcaaa gggtttatgc caaagaacaa accagtcctc tgcagcctaa 60
ctcatttgtt tttgggctgc gaagccatgt agagggcgat caggcagtag atggtccttc 120
ccacagtcag cgccatggtg gtccggtaaa gcatttggtc aggcaggcct cgtttcagggt 180
agacgggcac acatcagctt tctggaaaaa cttttgtagc tctggagctt tgtttttccc 240
agcataatca tacactgtgg aatcggagggt cagtttagtt ggtaaggcaa gaggagc 297

<210> 64
<211> 300
<212> DNA
<213> Homo sapiens

<400> 64
gcactgagag gaacttccaa tactatgttg aataggagtg gtgagagagg gcacccttgt 60
cttgtgccgg ttttcaaagg gaatgcttcc agcttttgcc cattcagtat aatattaaag 120
aatgttttac cattttctgt cttgcctgtt tttctgtgtt tttgttggtc tcttcattct 180
ccatttttag gcctttacat gtttaggaata tatttctttt aatgatactt cacccttgggt 240
atcttttgtg agactctact catagtgtga taagcactgg gttggtaagg caagaggagc 300

<210> 65
<211> 203
<212> DNA
<213> Homo sapiens

<400> 65
gtcctctcttg ccttaccaac tcaccagta tgtcagcaat tttatcrgct ttacctacga 60
aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgctt 120
ctcatgggtc tctctgctcc agttctgaac ctttctcttt tcctagaaca tgcatttarg 180
tcgatagaag ttctctctcag tgc 203

<210> 66
<211> 344
<212> DNA
<213> Homo sapiens

<400> 66
tacgggggacc cctgcattga gaaagcgaga ctcaactctga agctgaaatg ctgttgccct 60
tgcagtgtctg gtagcaggag ttctgtgctt tgtgggctaa ggctcctgga tgaccctga 120
catggagaag gcagagttgt gtgccccttc tcatggcctc gtcaaggcat catggactgc 180
cacacacaaa atgccgtttt tattaacgac atgaaattga aggagagaa acaattcact 240
gatgtggctc gtaaccatgg atatggtcac atacagaggt gtgattatgt aaaggttaat 300
tccaccacc tcatgtggaa actagcctca atgcagggt ccca 344

<222> 66, 160, 204, 246, 267, 334, 339, 342

<223> n = A,T,C or G

<400> 71

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cgtttagggtc tctatccact gctaaaccat acacctgggt aaacagggac catttaacat 60
tccanctaa atatgccaaag tgacttcaca tgtttatctt aaagatgtcc aaaacgcaac 120
tgattttctc ccctaaacct gtgatgggtg gatgattaan cctgagtggc ctacagcaag 180
ttaagtgcaa ggtgctaaat gaangtgacc tgagatacag catctacaag gcagtacctc 240
tcaacncagg gcaactttgc ttctcanagg gcatttagca gtgtctgaag taattttctgt 300
attacaactc acggggcgagg ggggtgaatat ctantggana gnagacccta acg 353
```

<210> 72

<211> 343

<212> DNA

<213> Homo sapiens

<400> 72

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gcactgagag gaacttcctaa tacyatkatc agagtgaaca rgcarccyac agaacaggag 60
aaaatgttyg caatctctcc atctgacaaa aggctaatat ccagawtcta awaggaactt 120
aaacaaatth atgagaaaag aacaracaac ctawcaaaa agtgggtgaa ggawatgcts 180
aaargaagac atytattcag ccagtaaaaca yatgaaaaaa aggctcatsa tcaactgawca 240
ttagagaaat gcaaatcaaa accacaatga gataccatct yayrccagtt agaaygggtga 300
tcattaaaaar stcaggaaac aacagatgct ggacaagggtg tca 343
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<210> 73

<211> 321

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 288

<223> n = A,T,C or G

<400> 73

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gcactgagag gaacttcaga gagagagaga gaggccacc ctgtacttgg ggagagaaac 60
agaagggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcc aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaattctt aaaaagggtg 240
cttgagttca gccttaaata ccatcttgaa atgacacaga gaaagaanga tggtgggtgg 300
gagtggtatg agaccctaac g 321
```

<210> 74

<211> 321

<212> DNA

<213> Homo sapiens

<400> 74

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gcactgagag gaacttcaga gagagagaga gaggccacc ctgtacttgg ggagagaaac 60
agaagggtgag aaagtctttg gttctgaagc agcttctaag atcttttcat ttgcttcatt 120
tcaaagttcc catgctgcc aagtgccatc ctttggggta ctgttttctg agctccagtg 180
ataactcatt tatacaaggg agatacccag aaaaaaagtg agcaaattctt aaaaagggtg 240
cttgagttca gyccttaaata ccatcttgaa atgamacaga gaaagaagga tggtgggtgg 300
gagtggtatg agaccctaac g 321
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<210> 75
 <211> 317
 <212> DNA
 <213> Homo sapiens

<400> 75
 gcactgagag gaacttccac atgcactgag aaatgcatgt tcacaaggac tgaagtcttg 60
 aactcagttt ctcagttcca atcctgattc aggtgtttac cagctacaca accttaagca 120
 agtcagataa ccttagcttc ctcatatgca aaatgagaat gaaaagtact catcgctgaa 180
 ttgttttgag gattagaaaa acatctggca tgcagtagaa attcaattag tattcatttt 240
 cattcttcta aattaaacaa ataggatttt tagtggtgga acttcagaca ccagaaatgg 300
 gagtggatag agaccct 317

<210> 76
 <211> 244
 <212> DNA
 <213> Homo sapiens

<400> 76
 cgttagggtc tctatccact ccactactg atcaaactct atttatttaa ttatTTTTat 60
 catactttta gttctgggat acacgtgcag catgctgcagg tttgttgcag aggtatacac 120
 ttgccatggt ggtttctgctg acccatcagt ccatcatcta cattaggtat ttctccta 180
 gctatccctc ccctagcccc ttacaccccc aacaggctct agtgtgtgaa gttcctctca 240
 gtgc 244

<210> 77
 <211> 254
 <212> DNA
 <213> Homo sapiens

<400> 77
 cgttagggtc tctatccact gaaatctgaa gcacaggagg aagagaagca gtyctagtga 60
 gatggcaagt tcwtttacca cactctttta catttygttt agttttaacc tttatttatg 120
 gataataaag gttaatatta ataatgattt attttaaggc attcccraat ttgcataatt 180
 ctcttttttg agataccctt ttatctccag tgcaagtctg gatcaaagtg atasamagaa 240
 gttcctctca gtgc 254

<210> 78
 <211> 355
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 69, 87, 186, 192, 220, 227, 251, 278, 339, 346, 350
 <223> n = A,T,C or G

<400> 78
 ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60
 cggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc 120
 cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg 180
 attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240
 ttctgtaga nggccccctt gtggaggaaa gctccatnag ttggtcatct tcaacaggat 300

ctcaacagtt tccgatggct gtgatgggca tagtcatant taacntgtn tcgaa 355

<210> 79
 <211> 406
 <212> DNA
 <213> Homo sapiens

<400> 79
 taagagggtg ccagcagaaa ggtagtagtgc atcagatagc atcttatacg agtaatatgc 60
 ctgctatttg aagtgttaatt gagaaggaaa attttagcgt gctcactgac ctgcctgtag 120
 cccagtgac agctaggatg tgcattctcc agccatcaag agactgagtc aagttgttcc 180
 ttaagtcaga acagcagact cagctctgac attctgattc gaatgacact gttcaggaat 240
 cggaatcctg tcgattagac tggacagcgt gtggcaagtg aatttgctg taacaagcca 300
 gatTTTTTaa aatttatatt gtaaataatg tgtgtgtgtg tgtgtgtata tatatatata 360
 tgtacagtta tctaagttaa tttaaaagtt gtttgggtacc ctctta 406

<210> 80
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 80
 tttttttttt tttactcggc tcagtctaatt cttttttgta gtcactcata ggccagactt 60
 agggctagga tgatgattaa taagagggat gacataacta ttagtggcag gttagttgtt 120
 tgtagggctc atggtagggg taaaaggagg gcaatttcta gatcaaataa taagaaggta 180
 atagctacta agaagaattt tatggagaaa gggacgcggg cgggggatat agggtcgaag 240
 ccgcactcgt aaggggtgga tttttctatg tagccgttga gttgtggtag tcaaaatgta 300
 ataattatta gtagtaagcc taggaga 327

<210> 81
 <211> 318
 <212> DNA
 <213> Homo sapiens

<400> 81
 tagtctatgc gggtgattcg gcaatccatt atttgctgga ttttgtcatg tgttttgcc 60
 attgcattca taatttatta tgcatttatg cttgtatctc ctaagtcatt gtatataatc 120
 catgcttttt atgttttgtc tgacataaac tcttatcaga gccctttgca cacagggatt 180
 caataaatat taacacagtc tacatttatt tggatgaat tgcataatct ctgtactgaa 240
 agcacattaa gtaacaaagg caagtgaaga gaatgaaaag cactactcac aacagttatc 300
 atgattgcgc atagacta 318

<210> 82
 <211> 338
 <212> DNA
 <213> Homo sapiens

<400> 82
 ttttcaacct ctactccac taatagcttt ttgatgactt ctagcaagcc tcgctaacct 60
 cgccttacct cccactatta acctactggg agaactctct gtgctagtaa ccacgttctc 120
 ctgatcaaat atcactctcc tacttacagg actcaacata ctagtcacag cctatactc 180
 cctctacata tttaccacaa cacaatggg ctactcacc caccacatta acaacataaa 240
 accctcatte acacgagaaa acaccctcat gttcatacac ctatccccca ttctcctcct 300
 atccctcaac cccgacatca ttaccgggtt ttctctct 338

<400> 87
ctcctaggct 10

<210> 88
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 88
agtagttgcc 10

<210> 89
<211> 11
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 89
ttccggttatg c 11

<210> 90
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 90
tggtaaagg 10

<210> 91
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 91
tcggtcatag 10

<210> 92
<211> 10

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 92
 tacaacgagg 10

 <210> 93
 <211> 10
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 93
 tggattgggc 10

 <210> 94
 <211> 10
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 94
 ctttctaccc 10

 <210> 95
 <211> 10
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 95
 ttttggtcc 10

 <210> 96
 <211> 10
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 101
tctgtccaca 10

<210> 102
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 102
aagagggtac 10

<210> 103
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 103
cttcaacctc 10

<210> 104
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 104
gctcctcttg ccttaccaac 20

<210> 105
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 110
 acgggggaccc ctgcattgag 20

 <210> 111
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 111
 tattctagac cattcgctac 20

 <210> 112
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 112
 acataaccac tttagcgttc 20

 <210> 113
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

 <400> 113
 cggggtgatgc ctcctcaggc 20

 <210> 114
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> PCR primer for amplification from breast cancer
 tumor cDNA

<400> 114
agcatgttga gccagacac 20

<210> 115
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 115
gacaccttgt ccagcatctg 20

<210> 116
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 116
tacgctgcaa cactgtggag 20

<210> 117
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> PCR primer for amplification from breast cancer
tumor cDNA

<400> 117
cgttagggtc tctatccact 20

<210> 118
<211> 20
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<211> 249
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<211> 332
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<213> Homo sapiens

<220>
<221> misc_feature
<222> 154, 224, 297, 330
<223> n = A,T,C or G

<400> 154
tcaagattcc ataggctgac ctggacagag atctcctggg tctggcccag gacagcaggc 60
tcaagctcag tggagaaggt ttccatgacc ctcagattcc cccaaacctt ggattgggtg 120
acattgcac tctcagaga gggaggagat gtangtctgg gcttccacag ggacctgga 180
ttttaggatc aggggtaccgc tggcctgagg cttggatcat tcanagcctg ggggtggaat 240
ggctggcagc ctgtggcccc attgaaatag gctctggggc actccctctg ttctanttg 300
aacttgggta aggaacagga atgtgggtcan cctatggaat cttga 345

<210> 155
<211> 295
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature

<222> 46, 199, 252, 266

<223> n = A,T,C or G

<400> 155

```
gacgcttggc cacttgacac attaaacagt tttgcataat cactancatg tatttctagt 60
ttgctgtctg ctgtgatgcc ctgccctgat tctctggcgt taatgatggc aagcataatc 120
aaacgctgtt ctgttaattc caagttataa ctggcattga ttaaagcatt atctttcaca 180
actaaactgt tcttcatana acagcccata ttattatcaa attaagagac aatgtattcc 240
aatatccttt anggccaaata tatttnatgt cccttaatta agagctactg tccgt      295
```

<210> 156

<211> 406

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 172, 178, 332, 338, 342, 381, 400, 402

<223> n = A,T,C or G

<400> 156

```
gacgcttggc cacttgacac tgcagtggga aaaccagcat gagccgctgc ccccaaggaa 60
cctcgaagcc caggcagagg accagccatc ccagcctgca ggtaaagtgt gtcacctgtc 120
aggtgggctt ggggtgagtg ggtgggggaa gtgtgtgtgc aaaggggggtg tnaatgtnta 180
tgcgtgtgag catgagtgtg ggctagtgtg actgcatgtc agggagtgtg aacaagcgtg 240
cggggggtgtg tgtgcaagtg cgtatgcata tgagaatatg tgtctgtgga tgagtgcatt 300
tgaaagtctg tgtgtgtgcg tgtggtcatg anggtaantt antgactgcg caggatgtgt 360
gagtgtgcat ggaacactca ntgtgtgtgt caagtggccn ancgtc      406
```

<210> 157

<211> 208

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 115, 119, 182, 187

<223> n = A,T,C or G

<400> 157

```
tgacgcttgg ccacttgaca cactaaaggg tgttactcat cactttcttc tctcctcggt 60
ggcatgtgag tgcacttatt cacttggcac tcatttgttt ggcagtgact gtaanccana 120
tctgatgcat acaccagctt gtaaattgaa taaatgtctc taatactatg tgctcacaat 180
anggtanggg tgaggagaag gggagaga      208
```

<210> 158

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 235

<223> n = A,T,C or G

<400> 158
 cttcaacctc cttcaacctc cttcaacctc ctggattcaa acaatcatcc cacctcagac 60
 tccttagtag ctgagactac agactcacgc cactacatct ggctaaattt ttgtagagat 120
 agggtttcat catgttgccc tggttggtct caaactcctg acctcaagca atgtgcccac 180
 ctcagcctcc caaagtgtctg ggattacagg cataagccac catgcccagt ccatntttaa 240
 tctttcctac cacattctta ccacactttc ttttatgttt agatacataa atgcttacca 300
 ttatgataca attgcccaca gtattaagac agtaacatgc tgcacaggtt tgtagcctag 360
 gaacagtagg caataccaca tagcttaggt gtgtggtaga ctataccatc taggtttgtg 420
 taagttacac tttatgtctgt ttacacaatg acaaaaccat ctaatgatgc atttctcaga 480
 atgtatcctt gtcagtaagc tatgatgtac aggggaacact gcccaaggac acagatattg 540
 tacctgt 547

<210> 159
 <211> 203
 <212> DNA
 <213> Homo sapiens

<400> 159
 gctcctcttg cettaccaac tcaccagta tgtcagcaat tttatcrgct ttacctacga 60
 aacagcctgt atccaaacac ttaacacact cacctgaaaa gttcaggcaa caatcgctt 120
 ctcattgggtc tctctgctcc agttctgaac ctttctcttt tcttagaaca tgcatttarg 180
 tcgatagaag ttcctctcag tgc 203

<210> 160
 <211> 402
 <212> DNA
 <213> Homo sapiens

<400> 160
 tgtaagtcca gcagtgtgat ggggtggaaca ggggtgtaag cagtaattgc aaactgtatt 60
 taaacaataa taataatatt tagcatttat agagcacttt atatcttcaa agtacttgca 120
 aacattayct aattaaatac cctctctgat tataatctgg atacaaatgc acttaaaactc 180
 aggacagggg catgagaraa gtatgcattt gaaagttggg gctagctatg ctttaaaaac 240
 ctatacaatg atgggraagt tagagttcag attctgttgg actgtttttg tgcatttcag 300
 ttcagcctga tggcagaatt agatcatatc tgcactcgat gactytgctt gataacttat 360
 cactgaaatc tgagtgttga tcatcacact gctcgactta ca 402

<210> 161
 <211> 193
 <212> DNA
 <213> Homo sapiens

<400> 161
 agcatgttga gccagacac tgaccaggag aaaaaccaac caatagaaac acgcccagac 60
 actgaccagg agaaaaacca accaataaaa acaggcccgg acataagaca aataataaaa 120
 ttagcggaca aggacatgaa aacagctatt gtaagagcgg atatagtggg gtgtgtctgg 180
 gctcaacatg cta 193

<210> 162
 <211> 147
 <212> DNA
 <213> Homo sapiens

<400> 162
 tgttgagccc agacactgac caggagaaaa accaaccaat aaaaacaggc ccggacataa 60
 gacaaataat aaaattagcg gacaaggaca tgaaaacagc tattgtaaga gcggatatag 120
 tgggtgtgtg ctgggctcaa catgcta 147

<210> 163
 <211> 294
 <212> DNA
 <213> Homo sapiens

<400> 163
 tagcatgttg agcccagaca caaatctttc cttagcaat aaatcatttc tgcataatgtt 60
 tttaaaacca cagctaagcc atgattattc aaaaggacta ttgtattggg tatttttgatt 120
 tgggttctta tctccctcac attatcttca tttctatcat tgacctctta tcccagagac 180
 tctcaaacctt ttatgttata caaatcacat tctgtctcaa aaaatatctc acccacttct 240
 cttctgtttc tgcgtgtgta tgtgtgtgtg tgtgtgtctg ggctcaacat gcta 294

<210> 164
 <211> 412
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 292
 <223> n = A,T,C or G

<400> 164
 cgggattggc tttgagctgc agatgctgcc tgtgaccgca cccggcgtgg aacagaaagc 60
 cacctggctg caagtgcgcc agagccgccc tgactacgtg ctgctgtggg gctggggcgt 120
 gatgaactcc accgccctga aggaagccca ggccaccgga tccccccgcg acaagatgta 180
 cggcgtgtgg tgggccggtg cggagcccga tgtgctgtac gtgggcgaag gcgccaaggg 240
 ctacaacgcg ctggtcttga acggctacgg cagcgagtcc aaggtgatcc angacatcct 300
 gaaacacgtg cagacaagg gccagggcac ggggcccaaa gacgaagtgg gctcgggtgct 360
 gtacacccgc ggcgtgatca tccagatgct ggacaagggtg tcaatcacta at 412

<210> 165
 <211> 361
 <212> DNA
 <213> Homo sapiens

<400> 165
 ttgacacctt gtccagcatc tgcattctgat gagagcctca gatggctacc actaatggca 60
 gaaggcaaag gagaacaggc attgtatggc aagaaaggaa gaaagagaga ggggagaaaag 120
 gtgctaggtt cttttcaaca accagttctt gatggaactg agagtaagag ctcaaggcca 180
 ggtgtgggtga ctccaaccag taatcccaac attttaggag gctgaggcag gcagatgtct 240
 tgaccccatg agtttgtgac cagcctgaac aacatcatga gactccatct ctacaataat 300
 tacaaaaatt aatcaggcat tgtggtatgc cctgtagtcc cagatgctgg acaagggtgc 360
 a 361

<210> 166
 <211> 427
 <212> DNA
 <213> Homo sapiens


```

tattttattta agattgattc catactccgt tttcaaggag aatccctgca gtctccttaa 240
aggtagaaca aatactttct attttttttt caccattgtg ggattggact ttaagagggtg 300
actctaaaaa aacagagaac aaatatgtct cagttgtatt aagcacggac ccatattatc 360
atattcactt aaaaaaatga tttcctgtgc accttttggc aacttctctt ttcaatgtag 420
ggaaaaactt agtcaccctg aaaaccacaca aaataaataa aacttgtaga tgtgggcaga 480
argtttgggg gtggacattg tatgtgttta aattaaaccc tgtatcactg agaagctgtt 540
gtatgggtca gagaaaatga atgcttagaa gctgttcaca tcttcaagag cagaagcaaa 600
ccacatgtct cagctatatt attattttatt ttttatgcat aaagtgaatc atttcttctg 660
tattaatttc caaagggttt taccctctat ttaaatgctt tgaaaaacag tgcattgaca 720
atgggttgat atttttcttt aaaagaaaaa tataattatg aaagccaaga taatctgaag 780
cctgttttat tttaaaactt tttatgttct gtggttgatg ttgtttgttt gtttgtttct 840
attttgttgg ttttttactt tgttttttgt tttgttttgt tttgttttdg catactacat 900
gcagtttctt taaccaatgt ctgtttggct aatgtaatta aagttgttaa tttatatgag 960
tgcatttcaa ctatgtcaat ggtttcttaa tttttattgt gtagaagtac tggtaatttt 1020
tttatttaca atatgtttaa agagataaca gtttgatatg ttttcatgtg tttatagcag 1080
aagttattta tttctatggc attccagcgg atatttttgt gtttgcgagg catgcagtca 1140
atattttgta cagttagtgg acagtattca gcaacgcctg atagcttctt tggccttatg 1200
ttaaataaaa agacctgttt gggatgtaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaa 1265

```

<210> 170

<211> 383

<212> DNA

<213> Homo sapiens

<400> 170

```

tgtaagtcca gcagtgtgat gacgatattc ttcttattaa tgtggtaatt gaacaaatga 60
tctgtgatac tgatcctgag ctaggaggcg ctgttcagtt aatgggactt cttcgtactc 120
taattgatcc agagaacatg ctggctacaa ctaataaaac cgaaaaaagt gaattttctaa 180
attttttcta caaccattgt atgcatgttc tcacagcacc acttttgacc aatacttcag 240
aagacaaatg tgaaaaggat aatatagttg gatcaaacaa aaacaacaca atttgtcccg 300
ataattatca aacagcacag ctacttgect taattttaga gttactcaca ttttgtgttg 360
aacatcacac tgctcgactt aca 383

```

<210> 171

<211> 383

<212> DNA

<213> Homo sapiens

<400> 171

```

tgggcacctt caatatcgca agttaaaaa aatgttgagt ttattatact tttgacctgt 60
ttagctcaac aggggtgaagg catgtaaaga atgtggactt ctgaggaatt ttctttttaa 120
aagaacataa tgaagtaaca ttttaattac tcaaggacta cttttggttg aagtttataa 180
tctagatacc tctacttttt gtttttgctg ttcgacagtt cacaaagacc ttcagcaatt 240
tacagggtaa aatcgttgaa gtagtggagg tgaaactgaa atttaaaatt attctgtaaa 300
tactataggg aaagaggctg agcttagaat cttttggttg ttcatgtgtt ctgtgctcct 360
atcatcacac tgctcgactt aca 383

```

<210> 172

<211> 699

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature
 <222> 641
 <223> n = A,T,C or G

<400> 172
 tcgggtgatg cctcctcagg cttgtcggtta gtgtacacag agctgctcat gaagcgacag 60
 cggctgcccc tggcaattca gaacctcttc ctctacactt ttgggtgcgct tctgaatcta 120
 ggtctgcatg ctggcggcgg ctctggccca ggccctcctgg aaagtttctc aggatgggca 180
 gcaactcgtg tgctgagcca ggcaactaaat ggactgctca tgtctgctgt catggagcat 240
 ggacagcagca tcacacgcct ctttgtggtg tccctgctcg tgggtggtaa cgcctgctc 300
 tcagcagtc tgctacggct gcagctcaca gcgccttct tccctggccac attgctcatt 360
 ggccctggcca tgcgcctgta ctatggcagc cgctagtccc tgacaacttc caccctgatt 420
 ccggaccctg tagattgggc gccaccacca gatccccctc ccaggccttc ctcctctctc 480
 catcagcggc cctgtaacaa gtgccttgtg agaaaagctg gagaagtgag ggcagccagg 540
 ttattctctg gaggttgggt gatgaagggg taccctagg agatgtgaag tgtgggtttg 600
 gttaaggaaa tgcttaccat cccccacccc caaccaagtt nttccagact aaagaattaa 660
 ggtaacatca atacctaggc ctgaggaggc atcaccgga 699

<210> 173
 <211> 701
 <212> DNA
 <213> Homo sapiens

<400> 173
 tcgggtgatg cctcctcagg ccagatcaaa cttgggggttg aaaactgtgc aaagaaatca 60
 atgtcggaga aagaattttg caaaagaaaa atgcctaatac agtactaatt taataggta 120
 cattagcagt ggaagaagaa atgttgatat tttatgtcag ctattttata atcaccagag 180
 tgcttagctt catgtaagcc atctcgtatt cattagaaat aagaacaatt ttattcgtcg 240
 gaaagaactt ttcaatttat agcatcttaa ttgctcagga ttttaaattt tgataaagaa 300
 agctccactt ttggcaggag tagggggcag ggagagagga ggctccatcc acaaggacag 360
 agacaccagg gccagtaggg tagctgggtg ctggatcagt cacaacggac tgacttatgc 420
 catgagaaga aacaacctcc aaatctcagt tgcttaatac aacacaagct catttcttgc 480
 tcacgttaca tgcctatgt agatcaacag caggtgactc agggaccag gctccatctc 540
 catatgagct tccatagtca ccaggacacg ggctctgaaa gtgtcctcca tgcagggaca 600
 catgcctctt cctttcattg ggcagagcaa gtcacttatg gccagaagtc aactgacagg 660
 gcagtgccat cctgctgtat gcctgaggag gcatcaccg a 701

<210> 174
 <211> 700
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 19
 <223> n = A,T,C or G

<400> 174
 tcgggtgatg cctcctcang cccctaaatc agagtccagg gtcagagcca caggagacag 60
 ggaaagacat agatttttaac cggccccctt caggagattc tgaggctcag ttcactttgt 120
 tgcagtttga acagaggcag caaggctagt ggttaggggc acggtctcta aagctgcact 180
 gcctggatct gcctcccagc tctgccagga accagctgcg tggccttgag ctgctgacac 240
 gcagaaagcc cctgtgggac ccagtctcct cgtctgtaag atgaggacag gactctagga 300
 accctttccc ttgggttggc ctcactttca caggctccca tcttgaactc tatctactct 360


```

tgctccagtc aacggttaca cggaagtaaa atctgtcgaa atgcaccatg aagctttgag 360
tgaagctctt cctggggaca atgtgggctt caatgtcaag aatgtgtctg tcaaggatgt 420
tcgtcgtggc aacggttgctg gtgacagcaa aaatgaccca ccaatggaag cagctggcct 480
cactgctcag gtgattatcc tgaaccatcc aggccaaata agtgccggct atgcccctgt 540
attggattgc cacacggctc acattgcatg caagtttgct gagctgaagg aaaagattga 600
tcgccgttct ggtaaaaagc tggaagatgg ccctaaattc ttgaagtctg gtgatgctgc 660
cattgttgat atggttcctg gcaagcccat gtgtgttgag agcttctcag actatccacc 720
tttgggtcgc tttgctgttc gtgatatgag acagacagtt gcggtgggtg tctgggctca 780
acatgcta

```

<210> 178

<211> 786

<212> DNA

<213> Homo sapiens

<400> 178

```

tagcatgttg agcccagaca cctgtgtttc tgggagctct ggcagtggcg gattcatagg 60
cacttgggct gcactttgaa tgacacactt ggctttatta gattcactag tttttaaaaa 120
attgttggtc gtttcttttc attaaagggt taatcagaca gatcagacag cataattttg 180
tatttaatga cagaaacgtt ggtacatttc ttcataatg agcttgcat ctgaagcaag 240
agcctacaaa aggcacttgt tataaatgaa agttctggct ctagaggcca gtactctgga 300
gtttcagagc agccagtgat tgttccagtc agtgatgcct agttatatag aggaggagta 360
cactgtgcac tcttctaggt gtaagggat gcaactttgg atcttaaaat tctgtacaca 420
tacacacttt atatatatgt atgtatgtat gaaaacatga aattagtttg tcaaatatgt 480
gtgtgttttag tatttttagct tagtgcaact atttccacat tatttattaa attgatctaa 540
gacactttct tgttgacacc ttgaatatta atgttcaagg gtgcaatgtg tattccttta 600
gattgtttaa gcttaattac tatgatattg agtaaattaa cttttaaaat gtatttgagc 660
ccttctgtag tgtcgtaggg ctcttacagg gtgggaaaga ttttaatttt ccagttgcta 720
attgaacagt atggcctcat tatatatatt gatattatagg agtttgtgtc tgggctcaac 780
atgcta

```

<210> 179

<211> 796

<212> DNA

<213> Homo sapiens

<400> 179

```

tagcatgttg agcccagaca ctggttaca gaccagacct gcttcctcca tatgtaaaaa 60
gcttttaaaa agccagtga cctttttaat actttggcaa ccttctttca caggcaaaga 120
acacccccat ccgccccttg tttggagtgc agagtgtggc tttggttctt tgccttgctt 180
ggagtatact tctaattcct gttgtcctgc acaagctgaa taccgagcta cccacggcca 240
cccaggccag gtttccactc atttattact ttatgtttct gttccattgc tggccacag 300
aaataagttt tcctttggag gaatgtgatt ataccctttt aatttctctc ttttgctttt 360
ttttaatatc attggtatgt gtttggccca gaggaactg aaattcacca tcatcttgac 420
tggcaatccc attaccatgc tttttttaaa aaacgtaatt tttcttgctt tacattggca 480
gagttagcct tcctggctac tggcttaatg tagtactca gtttctaggt ggcattagga 540
atgagacctg aagcacagac tgtcttacca caaagggtga caagatctca aaccttagcc 600
aaagggtat gtcaggtttc aatgctatct gcttctgttc ctgctcactg ttctggattt 660
tgtccttctt catccctagc accagaattt ccagctctcc ctccctacct tccctgtttt 720
taattctaatt ctatcagcaa aataactttt caaatgtttt aaccggtatc tccatgtgtc 780
tgggctcaac atgcta

```

<210> 180

<211> 488

<212> DNA

<213> Homo sapiens

<400> 180

```

ggatgtgctg caaggcgcatt aagttgggta acgccagggt tttcccagtc acgacgttgt 60
aaaacgcacg ccagtgaatt gtaatacgcac tcactatagg gcgaattggg cccgacgtcg 120
catgctcccc gccgccatgg ccgcgggata gcatgttgag cccagacacc tgcaggtcat 180
ttggagagat ttttcacgtt accagcttga tggctctttt caggaggaga gacactgagc 240
actcccaagg tgagggtgaa gatttcctct agatagccgg ataagaagac taggagggat 300
gcctagaaaa tgattagcat gcaaatttct acctgccatt tcagaactgt gtgtcagccc 360
acattcagct gcttcttggt aactgaaaag agagagggtat tgagactttt ctgatggccg 420
ctctaacatt gtaacacagt aatctgtgtg tgtgtgggtg tgtgtgtgtg tctgggctca 480
acatgcta                                     488

```

<210> 181

<211> 317

<212> DNA

<213> Homo sapiens

<400> 181

```

tagcatgttg agcccagaca cggcgacggg acctgatgag tggggtgatg gcacctgtga 60
aaaggaggaa cgtcatcccc catgatattg gggaccaga tgatgaacca tggctccgcg 120
tcaatgcata tttaatccat gatactgctg attggaagga cctgaacctg aagtttgtgc 180
tgcaggttta tcgggactat tacctcacgg gtgatcaaaa cttcctgaag gacatgtggc 240
ctgtgtgtct agtaagggat gcacatgcag tggccagtgt gccaggggta tggttgggtg 300
ctgggtcaa catgcta                                     317

```

<210> 182

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 493

<223> n = A,T,C or G

<400> 182

```

tagcatgttg agcccagaca ctggctgtta gccaaatcct ctctcagctg ctccctgtgg 60
tttggtgact caggattaca gaggcatacct gtttcaggga acaaaaagat tttagctgcc 120
agcagagagc accacataca ttagaatggg aaggactgcc acctccttca agaacaggag 180
tgagggtggg ggtgaatggg aatggaagcc tgcattccct gatgcatttg tgctctctca 240
aatcctgtct tagtcttagg aaaggaagta aagtttcaag gacggttccg aactgctttt 300
tgtgtctggg ctcaacatgc tatcccgcgg ccattggcgg cgggagcatg cgacgtcggg 360
cccaattcgc cctatagtga gtcgtattac aattcactgg ccgtcgtttt acaacgtcgt 420
gactgggaaa accctggcgt tacccaactt aatgccttg cagcacatcc ccttttccca 480
gctggcgtaa tancgaaaag gcccgca                                     507

```

<210> 183

<211> 227

<212> DNA

<213> Homo sapiens

<400> 183

```

gatttacgct gcaacactgt ggaggtagcc ctggagcaag gcaggcatgg atgcttctgc 60
aatcccaaaa tggagcctgg tatttcagcc aggaatctga gcagagcccc ctctaattgt 120
agcaatgata agttattctc tttgttcttc aaccttccaa tagccttgag cttccagggg 180
agtgtcgta atcattacag cctgggtctcc acagtgttgc agcgtaa 227

```

<210> 184

<211> 225

<212> DNA

<213> Homo sapiens

<400> 184

```

ttacgctgca acactgtgga gcagattaac atcagacttt tctatcaaca tgactgggggt 60
tactaaaaag acaacaaatc aatggcttca aaagtctaag gaataatttc gatacttcaa 120
ctttataaaa cctgacaaaa ctatcaatca agcataaaga cagatgaaga acatttccag 180
attttgcca atcagatatt ttacctccac agtggtgcag cgtaa 225

```

<210> 185

<211> 597

<212> DNA

<213> Homo sapiens

<400> 185

```

ggcccgacgt cgcattgctcc cggccgccat ggccgcggga ttcgttaggg tctctatcca 60
ctgggaccca taggctagtc agagtattta gatttgagtt cctttctgct tcccagaatt 120
tgaaagaaaa ggagttaggt gatagagctg agagatcaga tttgcctctg aagcctgttc 180
aagatgtatg tgctcagacc ccaccactgg ggctgtggg tgaggctctg ggcatctatt 240
tgaatgaatt gctgaagggg agcactatgc caaggaaagg gaacccatcc tggcactggc 300
acaggggtca ccttatccag tgctcagtcg ttctttgctg ctacctgggt tctctcata 360
tgtgaggggg aggtagaag aagtgcccg tggtgtgcga gttttagaac atctaccagt 420
aagtggggaa gtttcacaaa gcagcagctt tgttttgtgt attttcacct tcagttagaa 480
gaggaaggct gtgagatgaa tgtagttga gtggaaaaga cgggtaagct tagtgatag 540
agaccctaac gaatcactag tgcggccgcc ttgcaggctc accatatggg agagctc 597

```

<210> 186

<211> 597

<212> DNA

<213> Homo sapiens

<400> 186

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ggcccgaaat tgcattgtcc cggccgccat ggccgcggga ttcgttaggg tctctatcca 60
ctacctaaaa aatcccaaac atataactga actcctcaca cccaattgga ccaatccatc 120
acccagagg cctacagatc ctcccttgat acataagaaa atttcccaa actacctaac 180
tatatcattt tgcaagattt gttttaccaa attttgatgg cctttctgag cttgtcagtg 240
tgaaccacta ttacgaacga tcggatatta actgcccctc accgtccagg tgtagctggc 300
aacatcaagt gcagtaaata ttcattaaat tttcacctac taagggtgctt aaacacccta 360
gggtgccatg tcggtagcag atcttttgat ttgtttttat ttcccataag ggtcctgttc 420
aagggtcaatc atacatgtag tgtgagcagc tagtcactat cgcattgactt ggaggggtgat 480
aatagaggcc tcctttgctg ttaaagaact cttgtcccag cctgtcaaag tggatagaga 540
ccctaacgaa tcaactagtgc ggccgcctgc aggtcgacca tatgggagag ctcccaa 597

```

<210> 187

<211> 324

<212> DNA

<213> Homo sapiens

<400> 187
 tcgttaggggt ctctatccac ttgcaggtaa aatccaatcc tgtgtatatc ttatagtctt 60
 ccataatgtag tgggtcaaga gactgcagtt ccagaaagac tagccgagcc catccatgtc 120
 ttccacttaa ccctgctttg gggtacacat cttaactttt ctgttcaagt ttctctgtgt 180
 agtttatagc atgagtattg ggawaatgcc ctgaaacctg acatgagatc tgggaaacac 240
 aaacttactc aataagaatt tctcccatat ttttatgatg gaaaaatttc acatgcacag 300
 aggagtggat agagacccta acga 324

<210> 188

<211> 178

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 46

<223> n = A,T,C or G

<400> 188
 gcgcggggat tcgggggtgat acctcctcat gccaaaatac aacgtntaat ttcacaactt 60
 gccttccaat ttacgcattt tcaatttgct ctccccattt gttgagtcac aacaaacacc 120
 attgcccaga aacatgtatt acctaacatg cacatactct taaaactact catccctt 178

<210> 189

<211> 367

<212> DNA

<213> Homo sapiens

<400> 189
 tgacaccttg tccagcatct gacacagtct tggctcttgg aaaatattgg ataaatgaaa 60
 atgaatttct ttagcaagtg gtataagctg agaataacg tatcacatat cctcattcta 120
 agacacattc agtgtccctg aaattagaat aggacttaca ataagtgtgt tcactttctc 180
 aatagctgtt attcaattga tggtaggcct taaaagtcaa agaaatgaga gggcatgtga 240
 aaaaaagctc aacatcactg atcattagaa aacttccatt caaaccacca atgagatacc 300
 atctcatacc agtcagaatg gctattatta aaaagtcaaa aaataacaga tgctggacaa 360
 ggtgtca 367

<210> 190

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 323

<223> n = A,T,C or G

<400> 190
 gacaccttgt ccagcatctg acaacgctaa cagcctgagg agatctttat ttattttattt 60
 agtttttact ctggctaggc agatgggtggc taaaacattc atttaccat ttattcattt 120
 aattgttctt gcaaggccta tggatagagt attgtccagc actgctctgg aagctaggag 180
 catggggatg aacaagatag gctacatcct gttccacag aacttccact ttagtctggg 240
 aaacagatga tatatacaaa tatataaatg aattcaggta gttttaagta cgaaaagaat 300

aagaaagcag agtcatgatt tanaatgctg gaaacagggg ctattgcttg agatattgaa 360
ggtgcccaa 369

<210> 191
<211> 369
<212> DNA
<213> Homo sapiens

<400> 191
tgacaccttg tccagcatct gcacagggaa aagaaactat tatcagagtg aacagggaac 60
ctacagaatg ggagaaaatt ttgcaatct atccatctga caaagggcta atatccagaa 120
tctacaaaga acttatacaa atttacaaga acaaaacaaa caaacaactc ctcaaaaagt 180
gggtgaagga tgtgaacaga cacttctcaa aagaagacat ttatggggcc acaaacata 240
tgaaaaaaag ctcacatca ctgggtcacta gataaatgca aatcaaaaacc acaatgagat 300
accatctcat tccagttaga atggcaatca ttaaaaagtc aggaacaac agatgctgga 360
caaggtgtc 369

<210> 192
<211> 449
<212> DNA
<213> Homo sapiens

<400> 192
tgacgcttg ccacttgaca cttcatcttt gcacagaaaa acttctttac agatttaatt 60
caagactggc tagtgacag tctccagac attttttcat ttgttccata tacgtggaat 120
tttaaaatca tgtttcatca gtttgaaatg atttgggctg ctaatcaaca caattggatc 180
gactgttcta ctaacaaca ggaaaatgtg tatctggcag cctgtggaga aacactaaac 240
attgattttt ctttgccctt tacggacttt gttccagcta catgtaatac caagttctct 300
ttaagaggag aagatgttga tcttcatttg tttctaccag actgccacc tagtaaatat 360
tctttattta tgctggtaaa aaattgccat ccaaataaga tgattcatga tactgggtatt 420
cctgctgagt gtcaagtggc caagcgtca 449

<210> 193
<211> 372
<212> DNA
<213> Homo sapiens

<400> 193
tgacgcttg ccacttgaca ccagggatgt akcagttgaa tataatcctg caattgtaca 60
tattggcaat ttcccatcaa acattctaga aagagacaac caggattgct aggccataaa 120
agctgcaata aataactggt aattgcagta atcatttcag gccaatcaaa tccagtttg 180
ctcagaggtg ctttggctg agagaagagg tgagatataa tgtgttttct tgcaacttct 240
tggaagaata actccacaat agtctgagga ctagatacaa acctatttgc cattaaagca 300
ccagagtctg ttaattccag tactgataag tgttgagat tagactccag tgtgtcaagt 360
ggccaagcgt ca 372

<210> 194
<211> 309
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 140, 205

<212> DNA

<213> Homo sapiens

<400> 198

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gtatcgacgt agtgggtctcc caagcagtgg gaagaaaacg tgaaccaatt aaaatgtatc 60
agatacccca aagaaaggcg cttgagtaaa gattccaagt gggtcacaat ctcagatctt 120
aaaattcagg ctgtcaaaga gatttgcata gaggttgctc tcaatgactt caggcacagt 180
cggcaggaga ttgaagccct ggccattgtc aagatgaagg agctttgtgc catgtatggc 240
aagaaagacc ccaatgagcg ggactcctgg agaccactac gtcgatac 288
```

<210> 199

<211> 1027

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 17, 21, 36, 39, 40, 42, 63, 98, 116, 145, 162, 173, 865,
885, 891, 916, 924, 927, 929, 934, 942, 949, 976, 983, 988,
989, 1009, 1014

<223> n = A,T,C or G

<400> 199

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gcttttttggg aaaaacncaa ntgggggaaa gggggnttnn tngcaagggg ataaaggggg 60
aancccaggg tttccccatt cagggaggtg taaaaagncg gccaggggat tgtaanagga 120
ttcaataata gggggaatgg gccnngaagt tgcaaggttc cngcccgcca tgnccgcggg 180
atttagtgac attacgacgs tggtataaaa gtgggsccaa waaatatttg tgatgtgatt 240
tttsgaccag tgaaccatt gwacaggacc tcatttccty tgagatgrta gccataatca 300
gataaaaagt tagaagtytt tctgcacgtt aacagcatca ttaaattggag tggcatcacc 360
aatttcaccc tttgttagcc gataccttcc ccttgaaggc attcaattaa gtgaccaatc 420
gtcatacgag aggggatggc atggggattg atgatgatat caggggtgat accttcacag 480
gtgaaaggca tatcctcttg tctatactga ataccacaag tacccttttg accatgtcga 540
ctagcaaat tgtctccaat ctgtgtwatc cctaacagag cgtaccctta ttttcaaaaa 600
tttatatcct tcttgattga gagttaccat aacctgatcc acaatgcccg tctcgctwgt 660
tctgagaaaa gtgctacagt ctctcttggg atagcgtcta ttggtgctct ccaattcatc 720
ttcatttttc aggcaagggtg aactgttttg cctataataa cmtcatctcc tgatacmcga 780
aaccckkgga rctatcaaac catcatcatc cagcgttckt watgtymcta aatccctatt 840
gcggcgccct gcagggtcaac atatnggaaa acccccacc ccttnggagc ntaccttgaa 900
ttttccatat gtccntaaa ttanctngnc ttancttggc cntaacctnt tccggtttta 960
attgtttccg ccccnttcc cnccttnna accggaaacc ttaattttna accngggggt 1020
cctatcc 1027
```

<210> 200

<211> 207

<212> DNA

<213> Homo sapiens

<400> 200

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agtacatta cgacgctggc catcttgaat cctagggcat gaagttgccc caaagttcag 60
cacttggtta agcctgatcc ctctggttta tcacaaagaa taggatggga taaagaaagt 120
ggacacttaa ataagctata aattatatgg tcttgtcta gcaggagaca actgcacagg 180
tatactacca gcgtcgtaat gtcacta 207
```

<210> 201

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 447
<223> n = A,T,C or G

<400> 205
tacgctgcaa cactgtggag ccattcatat aggtccctaa ttaaggaaca agtgattatg 60
ctacctttgc acggtttagg taccgcggcc gttaaacaatg tgtcactggg caggcggtgc 120
ctctaatact ggtgatgcta gaggtgatgt ttttggtaaa caggcggggt aagatttgcc 180
gagttccttt tacttttttt aacctttcct tatgagcatg cctgtgttgg gttgacagtg 240
ggggttaataa tgacttggtg gttgattgta gatattgggc tgtaattgt cagttcagtg 300
ttttaatctg acgcaggctt atgcggagga gaatgttttc atgttactta tactaacatt 360
agttcttcta tagggtgata gattgggtcca attgggtgtg aggagtgcag ttatatgttt 420
gggatttttt aggtagtggg tgttgancct gaacgctttc ttaattgggt gctgctttta 480
rgcctactat ggggtggtaaa tggct 505

<210> 206
<211> 179
<212> DNA
<213> Homo sapiens

<400> 206
tagactgact catgtccctt accaaagccc atgtaaggag ctgagttcct aaagactgaa 60
gacagactat tctctggaga aaaataaaat ggaaattgta ctttaaaaaa aaaaaaatc 120
ggccgggcat ggtagcacac acctgtaatc ccagctacta ggggacatga gtcagtcta 179

<210> 207
<211> 176
<212> DNA
<213> Homo sapiens

<400> 207
agactgactc atgtccccta cccacacctt tgctgtgctg ccgtgttcct aacagggtcac 60
agactggtac tggtcagtgg cctgggggtt ggggacctct attatatggg atacaaattt 120
aggagttaga attgacacga tttagtgaact gatgggatat gggtggtaaa tggcta 176

<210> 208
<211> 196
<212> DNA
<213> Homo sapiens

<400> 208
agactgactc atgtccccta tttaacaggg tctctagtgc tgtgaaaaaa aaaaatgctg 60
aacattgcat ataacttata ttgtaagaaa tactgtacaa tgactttatt gcatctgggt 120
agctgtaagg catgaaggat gccaagaagt ttaaggaata tgggtggtaa atggctaggg 180
gacatgagtc agtcta 196

<210> 209
<211> 345
<212> DNA
<213> Homo sapiens

<220>
 <221> misc_feature
 <222> 53, 56
 <223> n = A,T,C or G

<400> 209
 gacgcttggc cacttgacac cttttatatt ttaaggattc ttaagtcatt tangtnactt 60
 tgtaagtttt tcctgtgccc ccataagaat gatagcttta aaaattatgc tggggtagca 120
 aagaagatac ttctagcttt agaattgtgta ggtatagcca ggattcttgt gaggaggggt 180
 gatttagagc aaattttctta ttctccttgc ctcatctgta acatggggat aataatagaa 240
 ctggccttgac aaggttggaa ttagtattac atggtaaata catgtaaaat gtttagaatg 300
 gtgccaagta tctaggaagt acttgggcat ggggtgtaaa tggct 345

<210> 210
 <211> 178
 <212> DNA
 <213> Homo sapiens

<400> 210
 gacgcttggc cacttgacac tagagtaggg tttggccaac tttttctata aaggaccaga 60
 gagtaaatat ttcaggcttt gtgggttgtg cagtctctct tgcaactact cagctctgcc 120
 attgtagcat agaaatcagc catagacagg acagaaatga atgggtggta aatggcta 178

<210> 211
 <211> 454
 <212> DNA
 <213> Homo sapiens

<400> 211
 tgggcacctt caatatctat ccagcgcac taaattcgct tttttcttga ttaaaaattt 60
 caccacttgc tgtttttgct catgtatacc aagtagcagt ggtgtgaggc catgcttggt 120
 ttttgattcg atatcagcac cgtataagag cagtgccttg gccattaatt tatcttcatt 180
 gtagacagca tagtgtagag tggatatctc atactcatct ggaatatttg gatcagtgcc 240
 atgttccagc aacattaacg cacattcatc ttcttggcat tgtacggcct ttgtcagagc 300
 tgtcctcttt ttgttgtcaa ggacattaag ttgacatcgt ctgtccagca cgagttttac 360
 tacttctgaa ttcccatttg cagaggccag atgtagagca gtcctctttt gcttgtccct 420
 cttgttcaca tcagtgtccc tgagcataac ggaa 454

<210> 212
 <211> 337
 <212> DNA
 <213> Homo sapiens

<400> 212
 tccgttatgc caccagaaaa acctactgga gttacttatt aacatcaagg ctggaaccta 60
 tttgcctcag tcctatctga ttcatgagca catgggttatt actgatcgca ttgaaaacat 120
 tgatcacctg gggtttcttta ttatcgact gtgtcatgac aaggaaactt acaaaactga 180
 acgcagagaa actattaaag gtattcagaa acgtgaagcc agcaattggt tcgcaattcg 240
 gcattttgaa aacaaatttg ccgtggaaac ttttaatttgt tcttgaacag tcaagaaaaa 300
 cattattgag gaaaattaat atcacagcat aacggaa 337

<210> 213
 <211> 715

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 552, 630, 649, 657, 691, 693, 697
<223> n = A,T,C or G

<400> 213
tcgggtgatg cctcctcagg catcttccat ccatctcttc aagattagct gtcccaaagt 60
tttttccttc tcttctttac tgataaattt ggactccttc ttgacactga tgacagcttt 120
agtatccttc ttgtcacctt gcagacttta aacataaaaa tactcattgg ttttaaaagg 180
aaaaaagtat acattagcac tattaagctt ggccttgaaa cattttctat cttttattaa 240
atgtcggtta gctgaacaga attcatttta caatgcagag tgagaaaaga agggagctat 300
atgcatttga gaatgcaagc attgtcaaata aaacatttta aatgctttct taaagtgagc 360
acatacagaa atacattaag atattagaaa gtgtttttgc ttgtgtacta ctaattaggg 420
aagcaccttg tatagttcct cttctaaaat tgaagtagat tttaaaaacc catgtaattt 480
aattgagctc tcagttcaga ttttaggaga attttaacag ggatttggtt ttgtctaaat 540
tttgtcaatt tntttagtta atctgtataa ttttataaat gtcaaactgt atttagtccg 600
ttttcatgct gctatgaaag aaatacccan gacagggtta tttataaang gaaagangtt 660
aatttgactc ccagttcaca ggcctgagga ngnatcnccc gaaatcctta ttgcg 715

<210> 214
<211> 345
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 6, 8, 15
<223> n = A,T,C or G

<400> 214
ggtaangngc ataentcggg gctccggccg ccggagtcgg gggattcggg tgatgcctcc 60
tcaggcccac ttgggcctgc ttttcccaaa tggcagctcc tctggacatg ccattccttc 120
tcccacctgc ctgattcttc atatgttggg tgtccctggt tttctgggtc tatttcctga 180
ctgctgttca gctgocactg tcctgcaaag cctgcctttt taaatgcctc accattcctt 240
catttgtttc ttaaataatg gaagtgaag tgccacctga ggccgggcac agtggctcac 300
gcctgtaatc ccagcacttt gggagcctga ggaggcatca cccga 345

<210> 215
<211> 429
<212> DNA
<213> Homo sapiens

<400> 215
ggtgatgcct cctcaggcga agctcaggga ggacagaaac ctcccgtgga gcagaagggc 60
aaaagctcgc ttgatcttga ttttcagtac gaatacagac cgtgaaagcg gggcctcacg 120
atccttctga ccttttgggt ttttaagcagg aggtgtcaga aaagttacca cagggataac 180
tggttgttgg cggccaagcg ttcatagcga cgtcgccttt tgatccttcg atgtcggctc 240
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cgtgagctgg gtttagaccg tcgtgagaca ggtaggttt accctactga tgatgtgtkg 360
ttgccatggg aatcctgctc agtacgagag gaaccgcagg ttcasacatt tgggtgtatgt 420
gcttgccctt 429

<210> 216
 <211> 593
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 15, 429, 446, 498, 512, 538, 543, 557
 <223> n = A,T,C or G

<400> 216
 tgacacctat gtcnngcatc tgttcacagt ttccacaaat agccagcctt tggccacctc 60
 tctgtcctga ggtatacaag tatatcagga ggtgtatacc ttctcttctc ttccccacca 120
 aagagaacat gcaggctctg gaagctgtct taggagcctt tgggctcaga atttcagagt 180
 cttgggtacc ttggatgtgg tctggaagga gaaacattgg ctctggataa ggagtacagc 240
 cggaggaggg tcacagagcc ctcaagctcaa gcccctgtgc cttagtctaa aagcagcttt 300
 ggatgaggaa gcagggttaag taacatacgt aagcgtacac aggtagaaag tgctgggagt 360
 cagaattgca cagtgtgtag gagtagtacc tcaatcaatg agggcaaadc aactgaaaga 420
 agaagaccna ttaatgaatt gcttangggg aaggatcaag gctatcatgg agatctttct 480
 aggaagatta ttgtttanaa ttatgaaagg antagggcag ggacagggcc agaagtanaa 540
 ganaacattg cctatanccc ttgtcttgca cccagatgct ggacaagggtg tca 593

<210> 217
 <211> 335
 <212> DNA
 <213> Homo sapiens

<400> 217
 tgacaccttg tccagcatct gacgtgaaga tgagcagctc agaggaggtg tcctggattt 60
 cctggttctg tgggctccgt ggcaatgaat tcttctgtga agtggatgaa gactacatcc 120
 aggacaaatt taatcttact ggactcaatg agcaggtccc tcactatcga caagctctag 180
 acatgatctt ggacctggag cctgatgaag aactggaaga caacccaac cagagtgacc 240
 tgattgagca ggcagccgag atgctttatg gattgatcca cgcccgctac atccttacca 300
 accgtggcat cgcccagatg ctggacaagg tgtca 335

<210> 218
 <211> 248
 <212> DNA
 <213> Homo sapiens

<400> 218
 tacgtactgg tcttgaaggt cttaggtaga gaaaaaatgt gaatatttaa tcaaagacta 60
 tgtatgaaat gggactgtaa gtacagaggg aaggggtggc cttatcgcca gaagttggta 120
 gatgcgtccc cgtcatgaaa tggtgtgtca ctgcccga tttgccgaat tactgaaatt 180
 ccgtagaatt agtgcaaatt ctaacgttgt tcatctaaga ttatgggtcc atgtttctag 240
 tactttta 248

<210> 219
 <211> 530
 <212> DNA
 <213> Homo sapiens

<220>

<221> misc_feature

<222> 49, 216, 265, 275, 281, 296, 371, 407, 424, 429, 454, 456,
458, 464, 474, 476, 506, 509, 527, 530

<223> n = A,T,C or G

<400> 219

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tgacgcttgg ccacttgaca caagtagggg ataaggacaa agacccatna ggtggcctgt 60
cagccttttg ttactgttgc ttccctgtca ccacggcccc ctctgtaggg gtgtgctgtg 120
ctctgtggac attggtgcat ttccacacat accattctct ttctgttca cagcagtcct 180
gaggcgggag cacacaggac taccttgta gatgangata atgatgtctg gccaactcac 240
cccccaacct tctcactagt tatangaaga gccangccta naaccttcta tcctgncccc 300
ttgccttatg acctcatccc tgttccatgc cctattctga tttctggtga actttggagc 360
agcctggttt ntccctcctca ctccagcctc tctccatacc atgggtanggg ggtgctgttc 420
cacncaaang gtcaggtgtg tctggggaat cctnananct gccnggagtt tccnangcat 480
tcttaaaaac cttcttgctt aatcanatng tgtccagtgg ccaaccntcn 530
```

<210> 220

<211> 531

<212> DNA

<213> Homo sapiens

<400> 220

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tgacgcttgg ccacttgaca ctaaatagca tcttctaaag gcctgattca gagttgtgga 60
aaattctccc agtgtcaggg attgtcagga acagggctgc tcctgtgctc actttacctg 120
ctgtgtttct gctggaaaag gaggggaagag gaatggctga tttttacctt atgtctccca 180
gtttttcata ttcttcttgg atcctcttct ctgacaactg ttcccttttg gtcttcttct 240
tcttgctcag agagcaggtc tctttaaacc tgagaaggga gaatgagcaa atgattaaag 300
aaaacacact tctgaggccc agagatcaaa tattaggtaa atactaaacc gcttgccctgc 360
tgtggctact tttctcctct ttcatatgct ctatccctct atccccacc tattcatatg 420
gcttttatct gccaaagttat ccggcctctc atcaaccttc tcccctagcc tactggggga 480
tatccatctg ggtctgtctc tgggtgtattg gtgtcaagtg gccaaagcgtc a 531
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<210> 221

<211> 530

<212> DNA

<213> Homo sapiens

<400> 221

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attgacgctt ggccacttga caccgcctg cctgcaatac tggggcaagg gccttcaactg 60
ctttcctgcc accagctgcc actgcacaca gagatcagaa atgctaccaa ccaagactgt 120
tggtcctcag cctctctgag gagaaagagc agaagcctgg aagtcagaag agaagctaga 180
tcggctacgg ccttggcagc cagcttcccc acctgtggca ataaagtcgt gcatggctta 240
acaatggggg caacctcctga gaaacacatt gttaggcaat tcggcgtgtg ttcacacag 300
catatttaca caaacctcga tagtgcagcc tactatccac tattgtcctt acgtgcataa 360
cctgaacagc atgggactgt actgaatact ggaagcagct ggtgatggta cttatttgtg 420
tatctaaaca cagagaaggt acagtaagaa tatggtatca taaacttaca gggaccgcca 480
tcctatatgc agtctgttgt gaccaaaatg tgtcaagtgg ccaagcgtca 530
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<210> 222

<211> 578

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature
 <222> 308, 381, 561, 570, 573
 <223> n = A,T,C or G

<400> 222
 tgtatcgacg tagtgggtctc cgggctacta ggccgttggtg tgctggtagt acctggttca 60
 ctgaaaggcg catctccctc cccgcgtcgc cctgaagcag ggggaggact tcgcccagcc 120
 aaggcagttg tatgagtttt agctgcggca cttcgagacc tctgagccca cctccttcag 180
 gagccttccc cgattaagga agccagggtg aggattcctt cctccccag acaccacgaa 240
 caaaccacca cccccctat tctggcagcc catatacatc agaacgaaac aaaaataaca 300
 aataaacnaa aaccaaaaaa aaaagagaag gggaaatgta tatgtctgtc catcctgttg 360
 ctttagcctg tcagctccta nagggcaggg accgtgtcct ccgaatggtc tgtgcagcgc 420
 cgactgcggg aagtatcgga ggaggaagca gagtcagcag aagttgaacg gtgggcccgg 480
 cggtctcttg gggtctgtgt tgtacttcga gaccgcttc gctttttgtc ttagatttac 540
 gtttctctt tggagtggga naccactacn tcnataca 578

<210> 223
 <211> 578
 <212> DNA
 <213> Homo sapiens

<400> 223
 tgtatcgacg tagtgggtctc ctcttgcaaa ggactggctg gtgaatgggt tccctgaatt 60
 atggacttac cetaaacata tcttatcatc attaccagtt gcaaaatatt agaattgtgt 120
 gtcactgttt catttgatcc ctagaagggt agtcttagat atgttacttt aacctgtatg 180
 ctgtagtgct ttgaatgcat tttttgtttg catttttgtt tgcccaacct gtcaattata 240
 gctgcttagg tctggactgt cctggataaa gctgttaaaa tattcaccag tccagccatc 300
 ttacaagcta attaatgcaa ctaaatgctt ccttgttttg ccagacttgt tatgtcaatc 360
 ctcaatttct gggttcattt tgggtgccct aaatcttagg gtgtgacttt cttagcatcc 420
 tgtaacatcc attcccaagc aagcacaact tcacataata ctttccagaa gttcattgct 480
 gaagcctttc cttcaccag cggagcaact tgattttcta caacttcctt catcagagcc 540
 acaagagtat gggatatgga gaccactacg tcgataca 578

<210> 224
 <211> 345
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 13
 <223> n = A,T,C or G

<400> 224
 tgtatcgacg tantgggtctc ccaagggtgct gggattgcag gcatgagcca ccactcccag 60
 gtggatcttt ttctttatac ttacttcatt aggtttctgt tattcaagaa gtgtagtggt 120
 aaaagtcttt tcaatctaca tggttaaata atgatagcct gggaaataaa tagaaatttt 180
 ttctttcatc tttaggttga ataaagaaac agaaaaata gaacatactg aaaataatct 240
 aagttccaac catagaagaa ctgcagaaga aatgaagaaa gtgatgatga tttagatttt 300
 gatattgatt tagaagacac aggaggagac cactacgtcg ataca 345

<210> 225
 <211> 347
 <212> DNA

<213> Homo sapiens

<400> 225

```
tgtatcgacg tagtgggtctc caaactgagg tatgtgtgcc actagcacac aaagccttcc 60
aacagggacg caggcacagg cagtttaaaag ggaatctgtt tctaaattaa tttccacctt 120
ctctaagtat tctttcctaa aactgatcaa ggtgtgaagc ctgtgctctt tcccaactcc 180
cctttgacaa cagccttcaa ctaacacaag aaaaggcatg tctgacactc ttcctgagtc 240
tgactctgat acgttggttct gatgtctaaa gagctccaga acaccaaaagg gacaattcag 300
aatgctggtg tataacagac tccaatggag accactacgt cgataca 347
```

<210> 226

<211> 281

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 4, 6, 11

<223> n = A,T,C or G

<400> 226

```
aggngnggga ntgtatcgac gtagtgggtct cccaacagtc tgtcattcag tctgcagggtg 60
tcagtgtttt ggacaatgag gcaccattgt cacttattga ctctcagct ctaaagtctg 120
aaattaaatc ttgtcatgac aagtctggaa ttctgatga ggttttacaa agtatatttg 180
atcaatactc caacaaatca gaaagccaga aagaggatcc tttcaatatt gcagaaccac 240
gagtggattt acacacctca ggagaccact acgtcgatac a 281
```

<210> 227

<211> 3646

<212> DNA

<213> Homo sapiens

<400> 227

```
gggaaacact tcttcccagc cttgtaaggg ttggagccct ctccagtata tgctgcagaa 60
tttttctctc ggtttctcag aggattatgg agtccgcctt aaaaaaggca agctctggac 120
actctgcaaa gtagaatggc caaagtttgg agttgagtgg ccccttgaag ggtcactgaa 180
cctcacaatt gttcaagctg tgtggcgggt tgttactgaa actcccgcc tccctgatca 240
gtttccctac attgatcaat ggctgagttt ggtcaggagc accccttccg tggtccact 300
catgcaccat tcataatttt acctccaagg tctcctgag ccagaccgtg ttttcgctc 360
gaccctcagc cggttcggct cgccctgtac tgctctctc tgaagaagag gagagtctcc 420
ctcaccagc cccaccgct taaaaccagc ctactccctt agggcatcc catgtctcct 480
cggctatgtc cctgtaggc tcatcaccca ttgctcttg gttgcaaccg tgggtgggag 540
aagtagcccc tctactacca ctgagagagg cacaagtccc tctgggtgat gagtgtcca 600
cccccttctt ggtttatgtc cttcttttct acttctgact tgtataattg gaaaaccat 660
aatcctccct tctctgaaaa gccccaggct ttgacctcac tgatggagtc tgtactctgg 720
acacattggc ccacctggga tgactgtcaa cagctccttt tgacctttt cacctctgaa 780
gagagggaaa gtatccaaag agaggccaaa aagtacaacc tcacatcaac caataggccg 840
gaggaggaag ctagaggaat agtgattaga gacccaattg ggacctaat gggaaccaa 900
tttctcaagt ggagggagaa cttttgacga tttccaccg tatctcctc tgggtattca 960
gggagctgct cagaaacct taaacttgtc taaggcgact gaagtcgtcc aggggcatga 1020
tgagtcacca ggagtgttt tagagcacct ccaggaggct tatcagattt acacccttt 1080
tgacctggca gccccgaaa atagccatgc tcttaatttg gcatttgtg ctcaggcagc 1140
cccagatagt aaaaggaaac tccaaaaact agagggattt tgctggaatg aataccagtc 1200
agcttttaga gatagcctaa aaggtttttg acagtcaaga gttgaaaaa caaaaacaag 1260
```

```

cagctcaggc agctgaaaaa agccactgat aaagcatcct ggagtatcag agtttactgt 1320
tagatcagcc tcatttgact tccccctcca catggtggtt aaatccagct acactacttc 1380
ctgactcaaa ctccactatt cctgttcatt actgtcagga actggttgaa actactgaaa 1440
ctggccgacc tgatcttcaa aatgtgcccc taggaaaggt ggatgccacc atgttcacag 1500
acagtagcag cttcctcgag aagggactac gaaaggccgg tgcagctgtt accatggaga 1560
cagatgtgtt gtgggctcag gctttaccag caaacacctc agcacaaaag gctgaattga 1620
tcgccctcac tcaggctctc cgatggggta aggatattaa cgtaaactac gacagcaggt 1680
acgcctttgc tactgtgcat gtacgtggag ccatctacca ggagcgtggg ctactcacct 1740
cagcaggtgg ctgtaatcca ctgtaaagga catcaaaagg aaaacacggc tgttgcccg 1800
ggtaaccaga aagctgattc agcagctcaa gatgcagtgt gactttcagt cagcctcta 1860
aacttgctgc ccacagtctc ctttcacag ccagatctgc ctgacaatcc cgcatactca 1920
acagaagaag aaaactggcc tcagaactca gagccaataa aaatcaggaa gggttggtgga 1980
ttcttcctga ctctagaatc ttcatacccc gaactcttgg gaaaacttta atcagtcacc 2040
tacagtctac caccatttta ggaggagcaa agctacctca gctcctccgg agcgttttta 2100
agatcccca tcttcaaagc ctaacagatc aagcagctct ccggtgcaca acctgcgcc 2160
aggtaaagtc caaaaaaggt cctaaacca gccaggcca ccgtctcaa gaaaactcac 2220
caggagaaaa gtgggaaatt gactttacag aagtaaaacc acaccgggct gggtagaaat 2280
accttctagt actggtagac accttctctg gatggactga agcatttgct accaaaaacg 2340
aaactgtcaa tatggtagt aagtttttac tcaatgaaat catccctoga catgggctgc 2400
ctgtttgcca tagggtctga taatggaccg gccttcgcct tgtctatagt ttagtcagtc 2460
agtaaggcgt taaacattca atggaagctc cattgtgcct atcgacccca gagctctggg 2520
caagtagaac gcatgaactg caccctaaaa aacactctta caaaattaat cttagaaacc 2580
ggtgtaaatt gtgtaagtct ccttccttta gccctactta gagtaagggtg cacccttac 2640
tgggctgggt tcttaccttt tgaaatcatg tatgggaggg tgctgcctat cttgcctaag 2700
ctaagagatg cccaattggc aaaaatatca caaactaatt tattacagta cctacagtct 2760
ccccaacagg tacaagatat catectgcca cttgttcgag gaacccatcc caatccaatt 2820
cctgaacaga cagggccctg ccattcatte ccgccagggt acctgttgtt tgtaaaaaag 2880
ttccagagag aaggactccc tectgcttgg aagagacctc acaccgtcat cacgatgcca 2940
acggctctga aggtggatgg cattcctgcg tggattcatc actcccgcat caaaaaggcc 3000
aacagagccc aactagaaac atgggtcccc agggctgggt caggccctt aaaaactgcac 3060
ctaagttggg tgaagccatt agattaattc ttttcttaa ttttgtaaaa caatgcatag 3120
cttctgtcaa acttatgtat ctttaagactc aatataacc ccttggtata actgaggaat 3180
caatgatattg attcccccaa aaacacaagt ggggaatgta gtgtccaacc tggtttttac 3240
taacctgtt tttagactct ccctttcctt taatcactca gcttgtttcc acctgaattg 3300
actctccctt agctaagagc gccagatgga ctccatcttg gctctttcac tggcagccgc 3360
ttctcaagg acttaacttg tgcaagctga ctcccagcac atccaagaat gcaattaact 3420
gataagatac tgtggcaagc tatatccgca gttcccagga attcgtccaa ttgatcacag 3480
cccctctacc cttcagcaac caccacctg atcagtcagc agccatcagc accgaggcaa 3540
ggccctccac cagcaaaaag attctgactc actgaagact tggatgatca ttagtatattt 3600
tagcagtaaa gttttttttt ctttttctt ctttttttct cgtgcc 3646

```

```

<210> 228
<211> 419
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 402
<223> n = A,T,C or G

```

```

<400> 228
taagagggtg caagatctaa gcacagccgt caatgcagaa cacagaacgt agcctggtaa 60
gtgtgttaag agtgggaatt tttggagtac agagtaaggc acctaaccct agctgggggt 120

```

```

tggtgacggt cccagatggc ttacagaaga aagtgtcctg agatgagttt ttaagaatga 180
ataaggatag acacaagtga ggactgactt ggcagtgggt aatgggtgggt ggcaaaaaac 240
ttcgcatgta tggaaactgc acgtacagga atgaagaatg agactgtgtg gtgtttaatg 300
agctgcaa atactaatttta tcctgaaaagt tttgaagagt taactaaaaa gtatatttta 360
gtaaggaaat aaccctacat ttcaggggta ttgtttgttt anatattgaa ggtgcccaa 419

```

```

<210> 229
<211> 148
<212> DNA
<213> Homo sapiens

```

```

<400> 229
aagagggtac ctgtatgtag ccatgggtggc aatgagagac tgattactac ctgctggaga 60
ttgtttaagt gagttaatat attaaggata aaggaggcca gggttttttga ctgttggaga 120
aggaaattac agatattgaa ggtcccaa 148

```

```

<210> 230
<211> 257
<212> DNA
<213> Homo sapiens

```

```

<400> 230
taagagggtta cmaaaaaaaaa aaaatagaac gaatgagtaa gacctactat ttgatagtag 60
aacagggtga ctatagtcaa tgataactta attatacatt taacatagag tgtaattgga 120
ttgtttgtaa ctggaaggat aaatgcttga gaggatggat accccattct ccatgatgta 180
cttattttcac attacatgcc tgtatcaaag catctcatat accctataaa tatgtacacc 240
tactatgtac cctctta 257

```

```

<210> 231
<211> 260
<212> DNA
<213> Homo sapiens

```

```

<400> 231
taagagggtta cgggtatttg ctgatgggat ttttttttct ttctttttct ttggaaaaca 60
aaatgaaagc cagaacaaaa ttattgaaca aaagacaggg actaaatctg gagaaatgaa 120
gtccctcac ctgactgcc tttcattcta tctgaccttc cagtctaggt taggagaata 180
gggggtggag gggattaatc tgatacaggt atatttaaag caactctgca tgtgtgccag 240
aagtcacatg taccctctta 260

```

```

<210> 232
<211> 596
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 437, 440, 461, 536, 541, 565, 580, 587, 590, 595
<223> n = A,T,C or G

```

```

<400> 232
tgctcctctt gccttaccaa ccacaaatta gaaccataat gagatgtcac ctcatacctg 60
gtgggattaa cattatttta aaaatcagaa gtattgacaa ggatgtgaag aaattagaac 120
atctgtgcac tgttgggtgg aatgtaaaaa aggtgtggcc actatgggta acagcatgaa 180

```



```

ggttcctcaa aaaaaatttt ttttaatcta ctctatgatc gatcttgagg ttgtttatgc 240
aaaagaactg aaatcaggat tttgaggaaa tattcacatt cccacatcca tttctgcttt 300
attcataata ctcaagagat ggaaacaacc taaatgtcca tcccgggatg aatggataaa 360
cacagtgtgg tatatgcata caatggaata ttatttagtc tttaaaaaga aaaattctat 420
catatactac aacttanatn aaccttgagg acacaatgct nagtgaaata agccacggaa 480
ggaogaatac tgcattattc ccttatatga agtatctaaa gtggtcaaac tcttanagca 540
naaagtaaaa atgggtgggt gccanacagt tggttaggcn agaaganaan cctant 596

```

```

<210> 233
<211> 96
<212> DNA
<213> Homo sapiens

```

```

<400> 233
tottctgaag acctttcgcg actcttaagc tcgtggttgg taaggcaaga ggagcgttgg 60
taaggcaaga ggagcgttgg taaggcaaga ggagca 96

```

```

<210> 234
<211> 313
<212> DNA
<213> Homo sapiens

```

```

<400> 234
tgtaagtcca gcagtgtgat gataaaactt gaatggatca atagttgctt cttatggatg 60
agcaaagaaa gtagtttctt gtgatggaat ctgctcctgg caaaaatgct gtgaacgttg 120
ttgaaaagac aacaaagagt ttagagtagt acataaattt agaatagtag ataaacttag 180
aatagtacat aaacttagta cataaataat gcacgaagca ggggcagggc ttgagagaat 240
tgacttcaat ttggaagag tatctactgt aggttagatg ctctcaaaca gcatcacact 300
gctogactta caa 313

```

```

<210> 235
<211> 550
<212> DNA
<213> Homo sapiens

```

```

<400> 235
aacgaggaca gatccttaaa aagaatgttg agtgaaaaaa gtagaaaata agataatctc 60
caaagtccag tagcattatt taaacatttt taaaaaatac actgataaaa attttgtaca 120
tttcccaaaa atacatatgg aagcacagca gcatgaatgc ctatgggrtt gaggataggg 180
gttgggagta gggatgggga taaaggggga aaataaaaacc agagaggagt cttacacatt 240
tcatgaacca aggagtataa ttatttcaac tatttgtacc wgaagtccag aaagagtgga 300
ggcagaaggg ggagaagagg gcgaagaaac gtttttggga gaggggtccc asaagagaga 360
ttttcgcgat gtggcgctac atacgttttt ccaggatgcc ttaagctctg caccctatct 420
ttctcatcac taatattaga ttaaaccctt tgaagacagc gtctgtggtt tctctacttc 480
agctttccct ccgtgtcttg cacacagtag ctgttttaca agggttgaac tgactgaagt 540
gagattattc 550

```

```

<210> 236
<211> 325
<212> DNA
<213> Homo sapiens

```

```

<400> 236
tagactgact catgtccctt accagagtag ctagaattaa tagcacaagc ctctacaccc 60

```


<223> n = A,T,C or G

<400> 239

```

tggaaagtat ttaatgatgg gcaacttgct gtttacttcc tacatatccc atcatcttct 60
gtatTTTTTT aaataacttt tttttggatt tttaaagtaa ccttattctg agaggtaaca 120
tggattacat acttctaagc cattaggaga ctctatgtta aaccaaaagg aaatgttact 180
agatcttcat ttgatcaata ggatgtgata atcatcatct ttctgctcta atggaaaagt 240
actanaaaca tggaaccata atcttagatg aacaacgtta gaatttgcac taattctacg 300
gaatttcagt aattcggcaa atgtcgggca gtgacacaac atttcatgac ggggacgcat 360
ctaccaactt ctggcgataa gggccaccct tccctctgta cttacagtcc catttcatac 420
acagtctttg attaaatatt cacatttttt ctctacctaa agaccttcaa gaccagtacg 480
ta                                                                                     482

```

<210> 240

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 491

<223> n = A,T,C or G

<400> 240

```

tgtatcgacg tagtgggtctc cccatgtgat agtctgaaat atagcctcat gggatgagag 60
gctgtgcccc agcccgcacac ccgtaaaggg tctgtgctga ggtggattag taaaagagga 120
aagccttgca gttgagatag aggaagggca ctgtctcctg cctgcccctg ggaactgaat 180
gtctcggtat aaaaccgcat tgtacatttg ttcaattctg agataggaga aaaaccaccc 240
tatggcgggg ggcgagacat gttggcagca atgctgcctt gttatgcttt actccacaga 300
tgtttgggcg gagggaaaca taaatctggc ctacgtgcac atccaggcat agtacctccc 360
tttgaactta attatgacac agattccttt gctcacatgt ttttttgctg accttctcct 420
tattatcacc ctgtctctct accgcattcc ttgtgctgag ataataaaaa taatatcaat 480
aaaaacttga nggaactcgg agaccactac gtcgataca                                                                                     519

```

<210> 241

<211> 771

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 304, 402, 442, 463, 510, 541, 550, 567, 571, 596, 617, 624, 644, 648, 652, 667, 682, 686, 719, 722, 729, 732, 751, 752, 757, 758, 760, 763, 766, 769

<223> n = A,T,C or G

<400> 241

```

tgtatcgacg tagtgggtctc cactcccgcc ttgacggggc tgctatctgc cttccaggcc 60
actgtcacgg ctcccggtga gaagtcactt atgagacaca ccagtgtggc cttgttggct 120
tgaagctcct cagaggaggg tgggaacaga gtgaccgagg gggcagcctt gggctgacct 180
aggacgggtca gcttgggtccc tccgccaac acgagagtgc tgctgcttgt atatgagctg 240
cagtaataat cagcctcgtc ctacgcctgg agcccagaga tggtcaggga ggccgtgttg 300
ccanacttgg agccagagaa gcgattagaa acccctgagg gccgattacc gacctcataa 360
atcatgaatt tgggggcttt gcctgggtgc tgttggtacc angagacatt attataacca 420

```

```

ccaacgtcac tgctgggtcc antgcaggga aaatgggtga tcnactgtc caagaaaacc 480
actacgtcca taccaatcca ctaattgccn gccgcctgca gggtcaacca tattggggaa 540
naactcccn cgcgcgtttg ggattgncat naacctttga aattttttcc tattanttgt 600
ccccctaaaa taaacnnttg gccnttaatc cattgggtcc atancttntt tncccggttt 660
ttaaaanttg tttatccgc cncnnttt ccccccaac tttccaaaac ccgaaacctt 720
tnaaatttnt tnaaacctg ggggggtccc nnaattnnan ttnaancnnc c 771

```

```

<210> 242
<211> 167
<212> DNA
<213> Homo sapiens

```

```

<400> 242
tgggcacctt caatatcggg ctcatcgata acatcacgct gctgatgctg ctgttgettg 60
tcctctctag gaacctctgg attttcaaatt tctttgagga attcatccaa attatctgcc 120
tctcctcctt tctcctttt tctaaggtct tctggtacaa gcggtca 167

```

```

<210> 243
<211> 338
<212> DNA
<213> Homo sapiens

```

```

<400> 243
ttgggcacct tcaatatcta ctgatctaaa tagtgtggtt tgaggcctct tgttcctggc 60
taaaaatcct tggcaagagt caatctccac tttacaatag aggtaaaaat cttacaatgg 120
atattcttga caaagctagc atagagacag caattttaca caaggatatt ttcacctgtt 180
taataacagt ggttttctta caccataggt gtgccaccaa gggaggagtg cacagttgca 240
gaaacaaatt aagatactga agacaacact acttaccatt tcccgtatag ctaaccacca 300
gttcaactgt acatgtatgt tcttatgggc aatcaaga 338

```

```

<210> 244
<211> 346
<212> DNA
<213> Homo sapiens

```

```

<400> 244
tttttggtc ccatacagca cactctcatg ggaaatgtct gttctaaggt caaccataa 60
tgcaaaaatc atcaatatac ttgaagatcc ccgtgtaagg tacaatgtat ttaatatatt 120
cactgatata attgatccaa taccagtttt agtctggcat tgaatcaaat cactgttttt 180
gttgtataaa aagagaaata tttagcttat atttaagtac catattgtaa gaaaaaagat 240
gcttatcttt acatgctaaa atcatgatct gtacattggg gcagtgaata ttactgtaaa 300
agggaagaag gaatgaagac gagctaagga tattgaaggt gcccaa 346

```

```

<210> 245
<211> 521
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 252, 337, 434, 455, 466, 478, 494, 510, 516
<223> n = A,T,C or G

```

```

<400> 245

```

```

accaatccca caccgatact gagggacaag tatatcatcc catttcatcc ctacagcagc 60
aacttcatga ggcaggaggt attagtccca ttttacagaa gaggaaactg agacttaggg 120
agatcaagta atttgcccag gtcgcacaat tagtgataga gccagggctt gaagcgacgt 180
ctgtcttaag ccaatgaccc ctgcagatta ttagagcaac tggtctccac aacagtgtaa 240
gcctcttgct anaagctcag gtccacaagg gcagagattt ttgtctgttt tgotcattgc 300
tccttcccca ttgcttagag cagggtctgc cacgaancag gttctcaatg catagtattt 360
aaatgtatat aagagcaaac atatgttaca gagaactttc tgtatgcttg tcacttacat 420
gaatcacctg tganatgggt atgcttggtc cccantgttg cagatnaaga tattgaangt 480
gcccaaatca ctanttgcg ggcctgcgcan gtccancata t 521

```

<210> 246

<211> 482

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 464

<223> n = A,T,C or G

<400> 246

```

tggaaccaat ccaaataccc atcaatgata gactggataa agaaaatttg gcacatgttc 60
accatgaaat actatgcagc cataaaaaag gatgagttca tatcctttgc agggacatgg 120
atgaagctgg agaccatcat tctcagcaaa ctaacaaggg aacagaaaac caaacactgc 180
atgtttctcac tcttaagtgg gagctgaaca atgagaacac atggacacag ggaggggaac 240
atcacacagt ggggcctgct ggtgggtagg ggtctagggg agggatagca ttaggagaaa 300
tacctaattg agatgacggg ttgatgggtg cagcaaacca ccatgacacg tgtataccta 360
tgtaacaaac ctgcatgttc tgcacatgta cccagaact taaagtgtta ataaaaaat 420
taagaaaaaa gttaagtatg tcatagatac ataaaatatt gtanatattg aaggtgcccc 480
aa 482

```

<210> 247

<211> 474

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 220, 255, 287, 312, 339, 374, 382, 403, 414, 426, 427, 428, 432, 433, 434, 435, 436, 465

<223> n = A,T,C or G

<400> 247

```

ttcgatacag gcacagagta agcagaaaaa tggctgtggt ttaaccaagt gagtacagtt 60
aagtgaagaa ggggcagaga agacaagggc atatgcaggg ggtgattata acagggtggt 120
gtgctgggaa gtgagggtac tcggggatga ggaacagtga aaaagtggca aaaagtggta 180
agatcagtgga attgtacttc tccagaattt gatttctggn ggagtcaaata aactatccag 240
tttgggggtat catanggcaa cagttgaggt ataggaggta gaagtcncag tgggataatt 300
gaggttatga anggtttggt actgactggt actgacaang tctgggttat gaccatggga 360
atgaatgact gtanaagcgt anaggatgaa actattccac ganaaagggg tccnaaaact 420
aaaaannnaa gnnnnngggg aatattattt atgtggatat tgaangtgcc caaa 474

```

<210> 248

<211> 355

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 69, 87, 186, 192, 220, 227, 251, 278, 339, 346, 350
<223> n = A,T,C or G

<400> 248
ttcgatacag gcaaacatga actgcaggag ggtggtgacg atcatgatgt tgccgatggt 60
ccggatggnc acgaagacgc actggancac gtgcttacgt ccttttgctc tgttgatggc 120
cctgagggga cgcaggaccc ttatgaccct cagaatcttc acaacgggag atggcactgg 180
attgantccc antgacacca gagacacccc aaccaccagn atatcantat attgatgtag 240
ttcctgtaga nggccccctt gtggaggaaa gctccatnag ttggatcatct tcaacaggat 300
ctcaacagtt tccgatggct gtgatgggca tagtcatant taaccntgtn tcgaa 355

<210> 249
<211> 434
<212> DNA
<213> Homo sapiens

<400> 249
ttggattggt cctccaggag aacaagggga aaaagggtgac cgagggtctcc ctggaactca 60
aggatctcca ggagcaaaaag gggatggggg aattcctggt cctgctggtc ccttaggtcc 120
acctggtcct ccaggcttac caggctctca aggcccaaag ggtaacaaaag gctctactgg 180
acccgctggc cagaaagggtg acagtgggtct tccagggcct cctgggcctc cagggtccacc 240
tggtgaagtc attcagcctt taccaatctt gtctctcaaa aaaacgagaa gacatactga 300
aggcatgcaa gcagatgcag atgataatat tcttgattac tcggatggaa tggaagaaat 360
at ttggttcc ctcaattccc tgaaacaaga catcgagcat atgaaatttc caatgggtac 420
tcagaccaat ccaa 434

<210> 250
<211> 430
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 301, 430
<223> n = A,T,C or G

<400> 250
tggattggtc acatggcaga gacaggattc caaggcagtg agaggaggat acaatgcttc 60
tcactagtta ttattattta ttttattttt gagatgaagt ctgcctttgt ctcccaggt 120
ggagagcggg ggtgogatct tggctctctg caacccccgc ctcaagcaat tctcctgtct 180
tagcctcgcg ggtagatgga attacaggcg cccaccgcc a tgcccaacta atttttttgt 240
gtcttcagta gagacagggt ttgcctatgt tgggcaggct ggtcttgaac tctgacctc 300
nagtgatctg cctcctcggt cctcacaaaag tgctggaatt acaggcatgg gctgctgcac 360
ccagtcaact tctcactagt tatggcctta tcattttcac cacattctat tggcccaaaa 420
aaaaaaaaan 430

<210> 251
<211> 329
<212> DNA

<213> Homo sapiens

<400> 251

```

tggtactcca ccatyatggg gtcaaccgcc atcctcgccc tcctcctggc tgtttctcaa 60
ggagtctgtg ccgaggtgca gctgrtgag tctggagcag aggtgaaaaa gtccggggag 120
tctctgaaga tctcctgtaa gggttctgga tacaccttta agatctactg gatcgccctgg 180
gtgcgccagt tgcccgggaa aggcctggag tggatggggc tcatctttcc tgatgactct 240
gataccagat acagcccgtc cttccaaggc caggtcacca tctcagtcga taagtccatc 300
agcaccgcct atctgcagtg gagtaccaa 329

```

<210> 252

<211> 536

<212> DNA

<213> Homo sapiens

<400> 252

```

tggtactcca ctcagcccaa ccttaattaa gaattaagag ggaacctatt actattctcc 60
caggctcttc tgctctaacc aggccttctgg gacagtatta gaaaaggatg tctcaacaag 120
tatgtagatc ctgtactggc ctaagaagtt aaactgagaa tagcataaat cagaccaaac 180
ttaatggctg ttgagacttg tgtcctggag cagctgggat aggaaaactt ttgggcagca 240
agaggaagaa ctgcctggaa gggggcatca tgttaaaaat tacaagggga acccacacca 300
ggcccccttc ccagctctca gcctagagta ttagcatttc tcagctagag actcacaact 360
tccttgctta gaatgtgcc a cgggggggag tccctgtggg tgatgaggct ctcaagagt 420
agagtggcat cctatcttct gtgtgccac aggagcctgg cccgagactt agcaggtgaa 480
gtttctggtc caggctttgc ccttgactca ctatgtgacc tctggtggag taccaa 536

```

<210> 253

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 1

<223> n = A,T,C or G

<400> 253

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ntggtgcat cccagtaact cgggaagctg aggcgggag atcacctgag ctcaggaggt 60
tgaggccgca gtgagccggg accacgccac tacactccag cctggggcat agagtgagac 120
cctccaagac agaaaagaaa agaaaggaag ggaaaggga agggaaaagg aaaaggaaaa 180
ggaaaaggaa aaggaaaaga caagacaaaa caagacttga atttgatct cctgacttca 240
attttatgtt ctttctacac cacaattcct ctgcttacta agatgataat ttagaaacct 300
ctcgttccat tctttacagc aagctggaag tttggtcaag taattacaat aatagtaaca 360
aatttgaata ttatatgcca ggtgttttct attcctgctc tcacttaatt ctcaccactc 420
tgatataaat acaattgctg ccgggtgtgg tggctcatgc ctgtaatccc ggcactttgg 480
gagaccgagg tgggcggats gcaacaa 507

```

<210> 254

<211> 222

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 167

<223> n = A,T,C or G

<400> 254

```
ttggattggt cactgtgagg aagccaaatc ggatccgaga gtctttttct aaaggccagt 60
actggccaca ctttctcctg ccgccttcct caaagctgaa gacacacaga gcaaggcgct 120
tctgttttac tccccaatgg taactccaaa ccatagatgg ttagctnccc tgctcatctt 180
tccacatccc tgctattcag tatagtcctg ggaccaatcc aa 222
```

<210> 255

<211> 463

<212> DNA

<213> Homo sapiens

<400> 255

```
tggtgcatc cataaatgct gaaatggaaa taaacaacat gatgagggag gattaagttg 60
gggagggagc acattaaggt ggccatgaag tttgttgga gaagtgactt ttgaacaagg 120
ccttggtgtt aagagctgat gagagtgtcc cagacagagg ggccactggt acaatagacg 180
agatgggaga gggcttggaa ggtgtgcaa ataggaagga gtttgttctg gtatgagtct 240
agtgaacaca gaggcgagag gccctgggtg gtgcagctgg agagtatatc agaataacat 300
taggccctgt gggggactgt agactgtcag caataatcca cagtttggtt tttattctaa 360
gagtgatggg aagccgtgga aaggggggta agcaaggagt gaaattatca gatttacagt 420
gataaaaata aattgggtctg gctactgggg aaaaaaaaaa aaa 463
```

<210> 256

<211> 262

<212> DNA

<213> Homo sapiens

<400> 256

```
ttggattggt caaactgctc aactctacyt ttctctcttc ttcttaaaaa attaatgaat 60
ccaatacatt aatgccaaaa ccttggggtt ttatcaatat ttctgttaaa aagtattatc 120
cagaactgga cataatacta cataataata cataacaacc ccttcatctg gatgcaaaca 180
tctattaata tagcttaaga tcactttcac tttacagaag caacatcctg ttgatgttat 240
tttgatgttt ggaccaatcc aa 262
```

<210> 257

<211> 461

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 2, 5, 6, 7, 8, 9, 10, 11, 12, 13, 25, 32, 38, 71, 72

<223> n = A,T,C or G

<400> 257

```
gnngnnnnnn nnncaattcg actcngttcc cntgggtancc ggtcgacatg gccgcgggat 60
taccgcttgt nncgtggggg gtatggggga ctatgaccgc ttgtagctgg ggggtgatgg 120
gggactatga ccgctttagt mtggkggtgt atgggggact atgaccgctt gtcgggtggt 180
cggataaacc gagcaagggt acgtgatcga agctgcgttc ccgctctttc gcatcggtag 240
ggatcatgga cagcaatatc cgcattcgyc tgaaggcggt cgaccatcgc gtgctcgatc 300
aggcgaccgg cgacatcgcc gacaccgcac gccgtaccgg cgcgctcatc cgcggtcoga 360
tcccgcttcc caccgcgcatc gagaagttca cgggtcaaccg tggcccgcac gtcgacaaga 420
```


agtcgcgcga gcagttcgag gtgcgtacct acaagcggtc a

461

<210> 258
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 251
<223> n = A,T,C or G

<400> 258
tgaccgcttg tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg 60
ggggactatg accgcttgta gctgggggtg tatgggggac tatgaccgct tgtagctggg 120
ggtgtatggg ggactaggac cgcttgtagc tgggggtgta tgggggacta tgaccgcttg 180
tagctggggg tgtatggggg actacgaccg cttgtagctg ggggtgtatg ggggactatg 240
accgcttgta nctgggggtg tatgggggac tatgaccgct tgtgctgcct gggggatggg 300
aggagagttg tggttgggga aaaaaaaaaa aa 332

<210> 259
<211> 291
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 141, 144, 167, 168, 171, 175, 194, 201, 202, 205, 209, 212,
235, 236, 245, 246, 258, 266, 268, 270, 273, 277, 285, 290
<223> n = A,T,C or G

<400> 259
taccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 60
gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt gaccgcttgt 120
gaccgcttgt gaccgcttgt nacngggggt gtctggggga ctatgannga ntgtnactgg 180
gggtgtcttg gggncatga nngantgtna cnggggggtg ctgggggact atganngact 240
gtgcnnctg ggggatcnga ggagantngn ggntagngat ggttngggan a 291

<210> 260
<211> 238
<212> DNA
<213> Homo sapiens

<400> 260
taagagggta ctggttaaaa tacaggaaat ctggggtaat gaggcagaga accaggatac 60
tttgaggtca gggatgaaaa ctagaatattt tttctttttt ttgacctgag aaacttgctg 120
ctctgaagag gcccatgtat taattgcttt gatcttcctt ttcttacagc cttttcaagg 180
gcagagccct ccttatcctg aaggaatctt atccttagct atagtatgta ccctctta 238

<210> 261
<211> 746
<212> DNA
<213> Homo sapiens

TCAGCGCGA GCAGTTCGAG GTGCGTACCT ACAAGCGGTC A

<220>
 <221> misc_feature
 <222> 662, 680, 685, 698, 707, 709, 734, 740, 741
 <223> n = A,T,C or G

<400> 261
 ttgggcacct tcaatatcaa tagctaacat ttattgagtg tttatcgtat cataaaacac 60
 tgttctaagc ctttaaacgt actaattcat ttaatgctca taatcacttt agaaggtggg 120
 tactagtatt agtctcattt acagatgcaa catgcaggca cagagagggt aattaacttg 180
 cccaaggtaa cacagctaag aaatagaaaa aatattgaat ctggaaagtt gggcttctgg 240
 gtaaccacaca gagtcttcaa tgagcctggg gcctcactca gtttgctttt acaaagcgaa 300
 tgagtaacat cacttaattc agtgagtagg ccaaaggag gtcagctacg agtttctgct 360
 gttcttgagc tggactgaca gatgtttaca acgtctggcc atcagtwaat ggactgatta 420
 tcattgggaw gtgggtgggc tgaatgttgg ccagtgaagt ttattcawgc catattttta 480
 tgtttaggat gacttttggc tggtcctagg gcaagctctg tctgscacgg aacacagaat 540
 wacacaggga cccctcaat ttctggtgtg gctagaacca tgaaccactg gttgggggaa 600
 caagcgggtca aaacctaaagt gcggccggct ggcagggtcc acccatatgg ggaaaactcc 660
 cnacgcgttt ggaatgctn agctngaatt attctaana ttgtccnnt aaaattagcc 720
 tgggcgttaa tcanggtcn naagcc 746

<210> 262
 <211> 588
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 485, 488, 489, 492, 493, 494, 496, 497, 498, 499, 502, 503,
 504, 506, 521, 537, 550, 564
 <223> n = A,T,C or G

<400> 262
 tgaccgcttg tcatctcaca tggggctcctg cacgcttttg cctttgtagg aaacctgaca 60
 tttgtctgtt tcttctttct cttttccttc ccatatcctc ctaatttacg tttgacttgt 120
 ttgctgagga ggcaggagct agagactgct gtgagctcat aggggtggga agtttatcct 180
 tcaagtcccg cccactcctc actgcttctc accttccct gaccaggctt acaagtgggt 240
 tcttgctgct tttccctttg gacccaacaa gcccctgtaa tgagtgtgca tgactctgac 300
 agctgtggac tcagggtcct tggctacagc tgccatgtaa aatatctcat ccagttctcg 360
 caaattgtta aaataaccac atttcttaga ttccagtacc caaatcatgt ctttacgaac 420
 tgctcctcac acccagaagt ggcacaataa ttcttgggga attattactt tttttttct 480
 ctctnttnc gnnngnnng gnnngnccag gaattaccac nttggaagac ctggccngaa 540
 tttattatan aggggagccg attntttttc ctaacacaaa gcgggtca 588

<210> 263
 <211> 730
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 124, 510, 534, 559, 604, 605, 635, 711, 729
 <223> n = A,T,C or G

<400> 263

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tttttttttt tttggcctga gcaactgaaa ttatgaaatt tccatatact caaaagagta 60
agactgcaaa aagattaaat gtaaaagttg tcttgtatac agtaatgttt aagataccta 120
ttanatttat aaatggaaaa ttagggcatt tggatataca agttgaaaat tcaggagtga 180
ggttgggctg gctgggtata tactgaaaac tgtcagtaca cagatgacat ctaaaaccac 240
aaatctgggt ttatttttagc agtgatatgt gtcactccca caaaagcctt cccaattggc 300
ctcagcatac acaacaagtc acctccccac agccctctac acataaaca attccttagt 360
ttagttcagg aggaaatgcg cctttttcct tccgctctag gtgaccgcaa ggcccagttc 420
tcgtcaccaa gatgttaagg gaagtctgcc aaagaggcat ctgaaaggaa ataaggggaa 480
tgggagtgc cacaaggaa agccaaggan aaactttgga gaccgtttct aganccctgg 540
catttcacaa caaaactcng gaacaaacct tgtctcatca atcatttaag cccttcgttt 600
ggannagact ttctgaactg ggcgctgaac ataancctca ttgaatgtct tcacagtctc 660
ccagctgaag gcacaccttg ggccagaagg ggaatcttcc aggtcctcaa nacagggctc 720
gccctttgnc
730

```

<210> 264

<211> 715

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 364, 451, 476, 494, 495, 515, 519, 524, 633, 635, 636, 645,
647, 649, 657, 692, 695, 701, 707, 710, 713

<223> n = A,T,C or G

<400> 264

```

tttttttttt tttggccagt atgatagtct ctaccactat attgaagctc ttaggtcatt 60
tacacttaat gtggttatag atgctgttga gcttacttct accaccttgc tatttctccc 120
gtctcttttt tgttcccttt ctcttctttt cctcccttat tttataattg aatttttttag 180
gattctattt tatatagatt tatcagctat aacactttgt attcttttgt tttgtggttc 240
ttctgtcatt tcaatgtgca tcttaaactc atcacaatct attttcaaat aatatcatat 300
aaccttacat ataatgtaag aatctaccac catatatctt catttctccc ttccatccta 360
tgtntgtcat attttttctt ttatatatgt tttaaagaca taatagtata tgggaggttt 420
ttgcttaaaa tgtgatcaat attccttcaa ngaaacgtaa aaattcaaaa taaatntctg 480
tttattctca aatnnaccta atatttctta ccatntctna tacntttcaa gaatctgaag 540
gcattggttt tttccggctt aagaacctcc tctaaagcac tctaagcaga attaagtctt 600
ctgggagagg aattctccca agcttgggcc ttnanntgta ctccntnang gttaaanntt 660
ggccgggaaa tagaaattcc aagttaacag gntanttttt nttttnttn tcncc 715

```

<210> 265

<211> 152

<212> DNA

<213> Homo sapiens

<400> 265

```

tttttttttt tttcccaaca caaagcacca ttatctttcc tcacaatttt caacatagtt 60
tgattcccat gaagaggtta tgatttctaa agaaaacatg gctactatac tatcaatcag 120
ggttaaatct tttttttttg agacggagtt ta
152

```

<210> 266

<211> 193

<212> DNA

<213> Homo sapiens

<210> 270
 <211> 519
 <212> DNA
 <213> Homo sapiens

<400> 270
 tgttgcgatc caaataaccc accagcttct tgcacacttc gcagaagcca ccgtcctttg 60
 gctgagtcac gtgaacggtc agtgcaagca gccgcgtgcc agagcagagg tgcagcatgc 120
 tgcacaccag ctcagggtcg acctcctcca gcaggatgga caggatggag ctgccgtacg 180
 tgtccaccac ctcctggcac ttttcgaca gggacttcgg cagcttcgag cacattttgt 240
 caaaagcgtc gagtatcttct ttctcagtct tgttggtgtc aatcagcttg gtcacctcct 300
 tcaccaggaa ttcacacacc tcacagtaaa catcagactt tgctgggacc tcgtgcttct 360
 taatgggctc caccagttcc agggcagggg tgacattctt ggaggccact ttggcgggga 420
 ccagagtcctg catgggcatc tctttcacct catcacagaa cccaaccago gcacagatct 480
 ccttggggttg catgtgcatc atcatctggg atcgcaaca 519

<210> 271
 <211> 457
 <212> DNA
 <213> Homo sapiens

<400> 271
 tttttttttt ttcggggcggc gaccggacgt gcactcctcc agtagcggtt gcacgtcgtg 60
 ccaatggccc gctatgagga ggtgagcgtg tccggcttcg aggagttcca ccgggccgtg 120
 gaacagcaca atggcaagac cattttcgcc tactttacgg gttctaagga cgccgggggg 180
 aaaagctggt gccccgactg cgtgcaggct gaaccagtcg tacgagaggg gctgaagcac 240
 attagtgaag gatgtgtgtt catctactgc caagtaggag aagagcctta ttggaaagat 300
 ccaaataatg acttcagaaa aaacttgaaa gtaacagcag tgcctacact acttaagtat 360
 ggaacacctc aaaaactggt agaactctgag tgtcttcagg ccaacctggt ggaaatgttg 420
 ttctctgaag attaagattt taggatggca atcaaga 457

<210> 272
 <211> 102
 <212> DNA
 <213> Homo sapiens

<400> 272
 tttttttttt ttgggcaaca acctgaatac cttttcaagg ctctggcttg ggctcaagcc 60
 cgcaggggaa atgcaactgg ccaggtcaca gggcaatcaa ga 102

<210> 273
 <211> 455
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 380, 415, 454
 <223> n = A,T,C or G

<400> 273
 tttttttttt ttggcaatca acaggtttaa gtcttcggcc gaagttaatc tcgtgttttt 60
 ggcaatcaac aggtttaagt cttcggccga agttaatctc gtgttttttg caatcaacag 120

```

gtttaagtct tcggccgaag ttaatctcgt gtttttggca atcaacaggt ttaagtcttc 180
ggccgaagtt aatctcgtgt ttttggcaat caacagggtt aagtcttcgg ccgaagttaa 240
tctcgtgttt ttggcaatca acagggtttaa gtcttcggcc gaagttaatc tcgtgttttt 300
ggcaatcaag aggtttaagt cttcggccga agttaatctc gtgttttttg caatcaacag 360
gtttaagtct tcggccgaan ttaatctcgt gtttttggca atcaacaggt ttaantcttc 420
ggccgaagtt aatctcgtgt ttttggcaat caana 455

```

```

<210> 274
<211> 461
<212> DNA
<213> Homo sapiens

```

```

<400> 274
tttttttttt ttggccaata cccttgatga acatcaatgt gaaaatcctc ggtaaaatac 60
tggcaaacca aatccagcag cacatcaaaa agcttatcca ccatgatcaa gtgggcttca 120
tccctgggat gcaaggctgg ttcaacataa gaaaatcaat aaatgtaatc catcacataa 180
acagaaccaa agacaaaaac cacatgatta tctcaataga tgcagaaaag gccttggaca 240
aattcaacag cccttcatgc taaacactct taataaacta gatattgatg gaatgtatct 300
caaaataata agagctattt atgacaaacc cacagccaat atcatactga atgggcaaag 360
actggaagca ttccctttga aaactggcac aagacaagga tgccctctct caccgctcct 420
attcaacata gtattggaag ttctggccag ggcaatcaag a 461

```

```

<210> 275
<211> 729
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 164, 193, 207, 215, 216, 220, 223, 241, 244, 254, 269, 271,
275, 290, 295, 298, 309, 318, 325, 326, 331, 352, 380, 401,
411, 420, 424, 426, 431, 433, 435, 438, 440, 442, 443, 448,
453, 464, 465, 468, 474, 475, 481, 487, 491, 503, 516
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 519, 530, 531, 542, 547, 549, 559, 561, 564, 582, 586, 587,
588, 589, 592, 595, 612, 614, 620, 631, 632, 635, 636, 644,
646, 649, 650, 651, 655, 657, 660, 661, 662, 663, 666, 672,
673, 674, 682, 687, 691, 693, 697, 700, 701, 704, 705
<223> n = A,T,C or G

```

```

<221> misc_feature
<222> 713, 715, 717, 718, 722, 726, 727
<223> n = A,T,C or G

```

```

<400> 275
tttttttttt ttggccaaca ccaagtcttc cacgtgggag gttttattat gttttacaac 60
catgaaaaca taggaagggtg gctgttacag caaacatttc agatagacga atcggccaaag 120
ctcccaaac ccacattca cagcctcttc cacacgtctc ccanagattg ttgtccttca 180
cttgcaaat canggatgtt ggaagtnac atttnnagtn gcnggaaccc catcagtga 240
ncantaagca gaantacgat gactttgana nacanctgat gaagaacacn ctacnganaa 300
ccctttctnt cgtgttanga tctcnngtcc ntcactaatg cggccccctg cnggtccacc 360
atttgggaga actcccccn cgttggatcc cccttgagt ntccattct ngtccccan 420

```

```

accngncttg ngngncantn cnnctcnca cntgtttcc ctgnngtnaa aatnngtttt 480
nccgcncccc naattccccc ccaatcaca gcgaancng aaggccttcn naagtgttta 540
angcccnngg gtttctctnt ntanttgag cctaccctcc cctttnnnnt tncngttgg 600
tcgcgccttg gncncgctn gttcctcttt nnggnnaca cctngntcnn nggcnctcn 660
nnnctnttcc tnnnactagc tngcctntcc ncnccngngn ncanngcaca ttncncnnac 720
tntgtnncc 729

```

```

<210> 276
<211> 339
<212> DNA
<213> Homo sapiens

```

```

<400> 276
tgacctgaca ttagtagat acttaataaa tatttgtgga atgaatggat gaagtggagt 60
tacagagaaa aatagaaaag tacaaattgt tgtcagtgtt ttgaaggaaa attatgatct 120
ttcccaaagt tctgacttca ttctaagaca gggttagtag ctccatacat aattttactt 180
gcttttgaaa atcaaagtag ataactctatt tagattgata atttatttag actggctata 240
aactattaag tgctagcaaa tatacatttt aatctcattt tccacctctt gtgatatagc 300
tatgtagggtg ttgactttaa tggatgtcag gtcaatccc 339

```

```

<210> 277
<211> 664
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 267, 534, 590, 601, 646, 657
<223> n = A,T,C or G

```

```

<400> 277
tgacctgaca tccataacaa aatctttctc cattatattc ttctagggga atttcttgaa 60
aagcatccaa aggaacacaa tgatggtaag accgtgccaa gtggggagca gacaccaaag 120
taagaccaca gatattacat tcaacaggta gctcacagta ctttgcccga cactgtgggc 180
agaaatagcc tctaagtga agcctggct cagtattgcc atccaaatgc gccatgctga 240
aagaggggtt tgcactctgg tcagatnaag aagcaatggg gtgctgagga aatcccatac 300
gaataagtga gcattcagaa cttgagctag caggaggagg actaagatga tgtgtgagca 360
actctttgta atggctttca tctaaaataa catggtacgt gccaccagtt tcacgagcaa 420
gtacagtga aacgcgaact tctgcagaca atccaataac agatactcta attttagctg 480
cctttagggt cttgattaaa tcataaatat tagatggatc gcaagttgta agnntgctaa 540
aagatgatta gtaactctcg acttgatgt ccaggcatgt tgttttaaan tctgccttag 600
nccctgctta ggggaatttt taaagaagat ggctctccat gttcanggtc aatcacnaat 660
tgcc 664

```

```

<210> 278
<211> 452
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 430
<223> n = A,T,C or G

```

<400> 278
 tgacctgaca ttgaggaaga gcacacacct ctgaaattcc ttaggttcag aagggcattt 60
 gacacagagt gggcctctga taattcatga aatgcattct gaagtcaccc agaattggagg 120
 ctgcaatctg ctgtgctttg ggggttgcct cactgtgctc ctggatatca cacaaaagct 180
 gcaatccttc ttcttcaact aacattttgc agtatttgct gggattttta ctgcagacat 240
 gatacatagc ccatagtgcc cagagctgaa cctctggttg agagaagttg ccaaggagcg 300
 ggaaaaatgt cttgaaagat ctataggtca ccaatgctgt catcttaciaa cttgaacttg 360
 gccaatctctg tatggttgca tgcagatctt ggagaagagt acgcctctgg aagtcacggg 420
 atatccaaan ctgtctgtca gatgtcaggt ca 452

<210> 279

<211> 274

<212> DNA

<213> Homo sapiens

<400> 279
 tttttttttt ttcggaagg caaatttact tctgcaaaag ggtgctgctt gcacttttgg 60
 ccactgcgag agcacacca acaaagtagg gaagggggtt ttatccctaa cgcggttatt 120
 ccctggttct gtgtcgtgct cccattggct ggagtcagac tgcacaatct aactgaccc 180
 aactggctac tgtttaaaat tgaatatgaa taattaggta ggaaggggga ggctgtttgt 240
 tacggtaciaa gacgtgtttg ggcattgctg gtca 274

<210> 280

<211> 272

<212> DNA

<213> Homo sapiens

<400> 280
 tacctgacat ggagaaataa cttgtagtat tttgcgtgca atggaatact atatgagggt 60
 gaaaatgaat gaactagcaa tgcgtgtatc aacatgaata aatcccaaaa acataataat 120
 gttgaatgga aaaggtagt ttcagaagga tatatatgcc ctctaaatcc atttatgtaa 180
 acctttaaaa aactacatta tttatgggtc taagtccatc cagaaaatat ttaaaaacct 240
 acatgggatt gataactact gatgtcaggt ca 272

<210> 281

<211> 431

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 339, 420, 430, 431

<223> n = A,T,C or G

<400> 281
 tttttttttt ttggccaata gcatgattta aacattggaa aaagtcaaat gagcaatgcg 60
 aatttttatg ttctcttgaa taatcaaaaag agtaggcaac attggttcct cattcttgaa 120
 tagcattaat cagaaaaat tgcatagcct ctagcctcct tagagtaggt gtgctctctc 180
 aaatatatca tagtcccaca gtttatttca tgtatatatt ctgcctgaat cacatagaca 240
 tttgaatttg caacgcctga tgtaaatata taaattctta ccaatcagaa acatagcaag 300
 aaattcaggg acttggtcat yatcagggtg tgacagcana tccctgtara aacactgata 360
 cacactcaca cacgtatgca acgtggagat gtcgcyyttw kkktywycwm rmrycrwcgn 420
 aatcacttan n 431

<210> 282
 <211> 98
 <212> DNA
 <213> Homo sapiens

<400> 282
 attcgattcg atgcttgagc ccaggagttc aagactgcag tgagccactg cacttcaggc 60
 tggacaacag agcgagtccc tgtgccaaaa aaaaaaaaaa 98

<210> 283
 <211> 764
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> 372, 374, 379, 380, 381, 382, 384, 387, 389, 392, 402, 409,
 411, 419, 421, 432, 440, 447, 452, 457, 466, 470, 471, 480,
 483, 492, 503, 506, 510, 512, 518, 520, 521, 524, 531, 534,
 536, 542, 545, 547, 550, 552, 553, 562, 566, 567, 575
 <223> n = A,T,C or G

<221> misc_feature
 <222> 580, 581, 584, 586, 587, 595, 598, 601, 603, 604, 606, 624,
 629, 630, 646, 651, 652, 653, 656, 659, 664, 665, 681, 691,
 700, 706, 709, 721, 724, 731, 732, 737, 741, 744, 745, 750,
 753, 754, 758
 <223> n = A,T,C or G

<400> 283
 tttttttttt ttgcgaagca cgtgcacttt attgaatgac actgtagaca ggtgtgtggg 60
 tataaactgc tgtatctagg ggcaggacca agggggcagg ggcaacagcc ccagcgtgca 120
 gggccascat tgcacagtgg astgcaaagg ttgcaggcta tgggcggcta ctavtaaccc 180
 cgttttttct gtattatctg taacataata tggtagactg tcacagagcc gaatwccart 240
 hacasgatga atccaawggt caygaggatg ccasasaatca gggcccasat sttcaggcac 300
 ttggcgggtgg gggcatasgc ctgkgccccg gtcacgtcsc caaccwtcty cctgtcccta 360
 cmcttgawtc cncncctttn nntnccntna tntgcccgcc cncctcctng ngtaaacnng 420
 natctgcaact anctccctcn ccccttntgg antctcntcc ttcaantaan nttatccttn 480
 acnccccct cncctttccc ctncncccn tnatcccnng nccnctatca ntentnccct 540
 cncntnctn cnnatcggtc cncctnntaa ctacnctttn nacnanncct cactnatncc 600
 ngnnantttct ttcccttccc ccnaccgcn tgcgtgcgcc cgtctngcct nnnctncgna 660
 ccnnaacttt atttaccttt ncaccctagc nctctacttn acccancnc tcctacctcc 720
 nggnccaccc nncctnato nctnctctn tcnctcntt cccc 764

<210> 284
 <211> 157
 <212> DNA
 <213> Homo sapiens

<400> 284
 caagtgtagg cacagtgatg aaagcctgga gcaaacacaa tctgtgggta attaacgttt 60
 atttctcccc ttccaggaac gtcttgcatg gatgatcaaa gatcagctcc tggtaacat 120
 aaataagcta gtttaagata cgttccccta cacttga 157

<210> 290
 <211> 1646
 <212> DNA
 <213> Homo sapiens

<400> 290
 ggcacgagga gaaatgtaat tccatatttt atttgaaact tattccatat ttttaattgga 60
 tattgagtga ttgggttatac aaacacccac aaactttaat tttgttaaata ttatatggct 120
 ttgaaataga agtataagtt gctaccattt tttgataaca ttgaaagata gtattttacc 180
 atctttaatc atcttggaaa atacaagtcc tgtgaacaac cactctttca cctagcagca 240
 tgaggccaaa agtaaaggct ttaaattata acatatggga ttcttagtag tatgtttttt 300
 tcttgaaact cagtggctct atctaaccct actatctcct cactctttct ctaagactaa 360
 actctaggct cttaaaaatc tgcccacacc aatcttagaa gctctgaaaa gaatttgtct 420
 ttaaatatct tttaatagta acatgtattt tatggaccaa attgacattt tgcactattt 480
 tttccaaaaa agtcaggtga atttcagcac actgagttgg gaattttotta tcccagaaga 540
 ccaaccaatt tcatatttat ttaagattga ttccatactc cgttttcaag gagaatccct 600
 gcagtctcct taaaggtaga acaaatactt tctatttttt tttcaccatt gtgggattgg 660
 actttaagag gtgactctaa aaaaacagag aacaaatatg tctcagttgt attaagcacg 720
 gacccatatt atcatattca cttaaaaaaa tgatttcctg tgcacctttt ggcaacttct 780
 cttttcaatg tagggaaaaa cttagtcacc ctgaaaacc acaaaataaa taaaacttgt 840
 agatgtgggc agaaggtttg ggggtggaca ttgtatgtgt ttaaattaaa ccctgtatca 900
 ctgagaagct gttgtatggg tcagagaaaa tgaatgctta gaagctgttc acatcttcaa 960
 gagcagaagc aaaccacatg tctcagctat attattattt attttttatg cataaagtga 1020
 atcattttct ctgtattaat ttccaaaggg ttttaccttc tattttaaag ctttgaaaaa 1080
 cagtgcattg acaatgggtt gatatttttc tttaaaagaa aaatataatt atgaaagcca 1140
 agataatctg aagcctgttt tatttttaaaa ctttttatgt tctgtggttg atgttgtttg 1200
 tttgtttgtt tctattttgt tgggttttta ctttgttttt tgttttgttt tgttttgttt 1260
 kgcatactac atgcagttct ttaaccaatg tctgtttggc taatgtaatt aaagtgtgta 1320
 atttataatga gtgcatttca actatgtcaa tggtttctta atatttattg tgtagaagta 1380
 ctggtaattt ttttatttac aatatgttta aagagataac agtttgatat gttttcatgt 1440
 gtttatagca gaagttattt atttctatgg cattccagcg gatatttttg tgtttgcgag 1500
 gcatgcagtc aatattttgt acagtttagt gacagtattc agcaacgcct gatagcttct 1560
 ttggccttat gttaaataaa aagacctgtt tgggatgtat tttttatttt taaaaaaaaa 1620
 aaaaaaaaaa aaaaaaaaaa aaaaaa 1646

<210> 291
 <211> 1851
 <212> DNA
 <213> Homo sapiens

<400> 291
 tcatcaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta 60
 cttccgtggt cttcattctt cttcaatagc cataaatctt ctagctctgg ctggctgttt 120
 tcacttcctt taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
 ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg 240
 caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag 300
 aagatacatc aacatttttg tcaagtagag ggctgactat acttgctgat ccacaacata 360
 cagcaagtat gagagcagtt cttccatata tatccagcgc atttaaattc gcttttttct 420
 tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtggtgtga 480
 ggccatgctt gttttttgat tcgatatcag caccgtataa gagcagtgct ttggccatta 540
 atttatcttc attgtagaca gcatagtgtg gagtggattt tccatactca tctggaatat 600
 ttggatcagt gccatgttcc agcaacatta acgcacattc atcttctctg cattgtacgg 660
 cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720
 gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct 780

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tttgcttgtc cctcttgttc acatccgtgt ccctgagcat gacgatgaga tcctttcttg 840
ggactttacc ccaccaggca gctctgtgga gcttgtccag atcttctcca tggacgtggt 900
acctgggata catgaaggcg ctgtcatcgt agtctcccca agcgaccacg ttgctcttgc 960
cgctcccctg cagcagggga agcagtggca gcaccacttg cacctcttgc tcccaagcgt 1020
cttcacagag gagtcgttgt ggtctccaga agtgcccacg ttgctcttgc cgctcccct 1080
gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct 1140
cagccatcaa acttctggac agcaggtcac ttccagcaag gtggagaaaag ctgtccaccc 1200
acagaggatg agatccagaa accacaatat ccattcacia acaaactt ttcagccaga 1260
cacaggtaac gaaatcatgt catctgcggc aacatggtgg aacctacca atcacacatc 1320
aagagatgaa gacactgcag tatacttgca caacgtaata ctcttcatcc ataacaaaat 1380
aatataatct tcctctggag ccataatgat gaactatgaa ggaagaactc cccgaagaag 1440
ccagtcgcag agaagccaca ctgaagctct gtccctcagc atcagcgcca cggacaggar 1500
tgtgtttctt cccagtgat gcagcctcaa gttatcccga agctgcccga gcacacggtg 1560
gctcctgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa 1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctgagaggaa atgcttctaa 1740
cttttcccca tttagtatta tgttggctgt gggctgttca taggtggttt ttattacttt 1800
aaggtatgtc ccttctatgc ctgttttgct gagggtttta attctcgtgc c 1851

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<210> 292
<211> 1851
<212> DNA
<213> Homo sapiens

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```

<400> 292
tcacaccat tgccagcagc ggcaccgtta gtcaggtttt ctgggaatcc cacatgagta 60
cttcogtgtt cttcattctt cttcaatagc cataaatctt ctgactctgg ctggctgttt 120
tcacttctct taagcctttg tgactcttcc tctgatgtca gctttaagtc ttgttctgga 180
ttgctgtttt cagaagagat ttttaacatc tgtttttctt tgtagtcaga aagtaactgg 240
caaattacat gatgatgact agaaacagca tactctctgg ccgtctttcc agatcttgag 300
aagatacatc aacattttgc tcaagtagag ggctgactat acttgctgat ccacaacata 360
cagcaagtat gagagcagtt cttccatata tatccagcgc atttaaattc gcttttttct 420
tgattaaaaa tttcaccact tgctgttttt gctcatgtat accaagtagc agtggtgtga 480
ggccatgctt gttttttgat tcgatatacag caccgtataa gagcagtgtt ttggccatta 540
atttatcttc attgtagaca gcatagtgta gagggtgatt tccatactca tctggaatat 600
ttggatcagt gccatgttcc agcaacatta acgcacattc atcttcctgg cattgtacgg 660
cctttgtcag agctgtcctc tttttgttgt caaggacatt aagttgacat cgtctgtcca 720
gcacgagttt tactacttct gaattcccat tggcagaggc cagatgtaga gcagtcctct 780
tttgcttgtc cctcttgttc acatccgtgt ccctgagcat gacgatgaga tcctttcttg 840
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gtccatccag ggaggaagaa atgcaggaaa tgaaagatgc atgcacgatg gtatactcct 1140
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acagaggatg agatccagaa accacaatat ccattcacia acaaactt ttcagccaga 1260
cacaggtaac gaaatcatgt catctgcggc aacatggtgg aacctacca atcacacatc 1320
aagagatgaa gacactgcag tatacttgca caacgtaata ctcttcatcc ataacaaaat 1380
aatataatct tcctctggag ccataatgat gaactatgaa ggaagaactc cccgaagaag 1440
ccagtcgcag agaagccaca ctgaagctct gtccctcagc atcagcgcca cggacaggar 1500
tgtgtttctt cccagtgat gcagcctcaa gttatcccga agctgcccga gcacacggtg 1560
gctcctgaga aacaccccag ctcttccggt ctaacacagg caagtcaata aatgtgataa 1620
tcacataaac agaattaaaa gcaaagtcac ataagcatct caacagacac agaaaaggca 1680
tttgacaaaa tccagcatcc ttgtatttat tgttgcagtt ctgagaggaa atgcttctaa 1740

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<210> 295
 <211> 1853
 <212> DNA
 <213> Homo sapiens

<400> 295
 ggggtcgccca gggggsgcgt gggctttcct cgggtgggtg tgggttttcc ctgggtgggg 60
 tgggctgggc trgaatcccc tgctgggggtt ggcaggtttt ggctgggatt gacttttytc 120
 ttcaaacaga ttggaaaccc ggagttacct gctagttggt gaaactggtt ggtagacgcg 180
 atctgttggc tactactggc ttctcctggc tgttaaaagc agatggtggt tgaggttgat 240
 tccatgccgg ctgcttcttc tgtgaagaag ccatttggtc tcaggagcaa gatgggcaag 300
 tgggtgctgcc gttgcttccc ctgctgcagg gagagcggca agagcaacgt gggcacttct 360
 ggagaccacg acgactctgc tatgaagaca ctcaggagca agatgggcaa gtggtgccgc 420
 cactgcttcc cctgctgcag ggggagtggc aagagcaacg tgggcgcttc tggagaccac 480
 gacgaytctg ctatgaagac actcaggaac aagatgggca agtgggtgctg cactgcttc 540
 ccctgctgca gggggagcrg caagagcaag gtgggcgctt ggggagacta cgatgacagy 600
 gccttcatgg akcccaggta ccacgtccrt ggagaagatc tggacaagct ccacagagct 660
 gcctggtggg gtaaagtccc cagaaaggat ctcatcgtca tgctcaggga cackgaygtg 720
 aacaagargg acaagcaaaa gaggactgct ctacatctgg cctctgccaa tgggaattca 780
 gaagtagtaa aactcstgct ggacagacga tgtcaactta atgtccttga caacaaaaag 840
 aggacagctc tgaayaaaggc cgtacaatgc caggaagatg aatgtgcgtt aatgttgctg 900
 gaacatggca ctgatccaaa tattccagat gagtatggaa ataccactct rcactaygct 960
 rtctayaatg aagataaatt aatggccaaa gcactgctct tatayggtgc tgatatcgaa 1020
 tcaaaaaaca agcatggcct cacaccactg ytacttgtr tacatgagca aaaacagcaa 1080
 gtsgtgaaat ttttaatyaa gaaaaaagcg aatttaaaat gcrctggata gatatggaag 1140
 ractgctctc atacttgctg tatgttgggt atcagcaagt atagtcagcc ytctacttga 1200
 gcaaaaatrtt gatgtatctt ctcaagatct ggaagacgg ccagagagta tgctgtttct 1260
 agtcatcatc atgtaatttg ccagttactt tctgactaca aagaaaaaca gatgttaaaa 1320
 atctcttctg aaaacagcaa tccagaacaa gacttaaaagc tgacatcaga ggaagagtca 1380
 caaaggctta aaggaagtga aaacagccag ccagaggcat ggaaactttt aaatttaaac 1440
 ttttggttta atgttttttt tttttgcctt aataatatta gatagtccca aatgaaatwa 1500
 cctatgagac taggctttga gaatcaatag attctttttt taagaatctt ttggctagga 1560
 goggtgtctc acgcctgtaa ttccagcacc ttgagaggct gaggtgggca gatcacgaga 1620
 tcaggagatc gagaccatcc tggctaacac ggtgaaaccc catctctact aaaaatacaa 1680
 aaacttagct ggggtgtggtg gcggtgtcct gtagtccag ctactcagga rgctgaggca 1740
 ggagaatggc atgaaccggg gaggtggagg ttgcagttag ccgagatccg ccactacact 1800
 ccagcctggg tgacagagca agactctgtc tcaaaaaaaa aaaaaaaaaa aaa 1853

<210> 296
 <211> 2184
 <212> DNA
 <213> Homo sapiens

<400> 296
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 aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
 tttcctctga gaactgcaac aataaatata aggatgctgg attttgtcaa atgccttttc 180
 tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
 ttattgactt gctgtgttta gaccggaaga gctgggggtg ttctcaggag ccaccgtgtg 300
 ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytccgtgtc 360
 gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
 ggagttcttc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta 480
 tggatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540

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ttgggtaggt tccacatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcattcttc atttcctgca tttcttcctc cctggatgga cagggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840
agcaagaggt gcaagtgggt ctgccactgc ttccctgctg gcagggggagc ggcaagagca 900
acgtggctgc ttggggagac tacgatgaca gcgccttcat ggatcccagg taccacgtcc 960
atggagaaga tctggacaag ctccacagag ctgcctgggt gggtaaagtc cccagaaagg 1020
atctcatcgt catgctcagg gacacggatg tgaacaagag ggacaagcaa aagaggactg 1080
ctctacatct ggctctgccc aatgggaatt cagaagtagt aaaactcgtg ctggacagac 1140
gatgtcaact taatgtcctt gacaacaaaa agaggacagc tctgacaaaag gccgtacaat 1200
gccaggaaga tgaatgtgcg ttaatgttgc tggaacatgg cactgatcca aatattccag 1260
atgagtattg aaataccact ctacactatg ctgtctacaa tgaagataaa ttaatggcca 1320
aagcactgct cttatacggg gctgatatcg aatcaaaaaa caagcatggc ctcacaccac 1380
tgctacttgg tatacatgag caaaaacagc aagtgggtgaa atttttaatc aagaaaaaac 1440
cgaattttaa tgcgttggat agatatggaa gaactgctct catacttgct gtatgttgtg 1500
gatcagcaag tatagtcagc cctctacttg agcaaaatgt tgatgtatct tctcaagatc 1560
tggaagagcg gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact 1620
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taataatatt agatagtcct aaatgaaatw acctatgaga ctaggctttg agaatcaata 1860
gattcttttt ttaagaatct tttggctagg agcgggtgct cagcctgta attccagcac 1920
cttgagaggg tgaggtgggc agatcacgag atcaggagat cgagaccatc ctggctaaca 1980
cgggtgaaacc ccatctctac taaaaataca aaaacttagc tgggtgtggg gccgggtgcc 2040
tgtagtccca gctactcagg argctgaggc aggagaatgg catgaaccgg ggaggtggag 2100
gttgacagtga gccgagatcc gccactacac tccagcctgg gtgacagagc aagactctgt 2160
ctcaaaaaaa aaaaaaaaaa aaaa

```

```

<210> 297
<211> 1855
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> misc_feature
<222> 606
<223> n = A,T,C or G

```

```

<400> 297
tgcacgcac ggccagtgtc tgtgccacgt aactgacgc cccctgagat gtgcacgccg 60
cacgcgcac ttgcacgcgc ggcagcggct tggctggctt gtaacggctt gcacgcgcac 120
gccgcccccg cataaccgtc agactggcct gtaacggctt gcaggcgcac gccgcacgcg 180
cgtaacggct tggctgccct gtaacggctt gcacgtgcat gctgcacgcg cgtaacggc 240
ttggctggca tgtagcgcgt tggcttggct ttgcatttct tgctkggctk gccgttgkty 300
tcttggattg acgcttcctc cttggatkga cgtttcctcc ttggatkga gtttcytyty 360
tcgcgttcct ttgctggact tgacctttty tctgctgggt ttggcattcc tttgggttgg 420
gctgggtgtt ttctccgggg gggktkgccc ttcttgggtt gggcgtgggk cccccccagg 480
gggcgtgggc tttccccggg tgggtgtggg ttttcttggg gtgggttggg ctgtgctggg 540
atccccctgc tggggttggc agggattgac tttttcttcc aaacagattg gaaacccgga 600
gtaacntgct agttgggtgaa actgggttgg agacgcgac tgctgggtact actgtttctc 660
ctggctgtta aaagcagatg gtggctgagg ttgattcaat gccggctgct tcttctgtga 720
agaagccatt tggctcagc agcaagatgg gcaagtgggt cgccactgct tccctgctg 780
cagggggagc ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa 840

```

```

gacgcttggg agcaagaggt gcaagtgggtg ctgcccactg cttcccctgc tgcaggggag 900
cggcaagagc aacgtggkcg cttggggaga ctacgatgac agcgcccttca tggakcccag 960
gtaccacgtc crtggagaag atctggacaa gctccacaga gctgcctggt ggggtaaagt 1020
ccccagaaag gatctcatcg tcatgctcag ggacactgay gtgaacaaga rggacaagca 1080
aaagaggact gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt 1140
gctggacaga cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa 1200
ggccgtacaa tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc 1260
aaatattcca gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa 1320
attaatggcc aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaaggata 1380
gatctactaa ttttatcttc aaaatactga aatgcattca ttttaacatt gacgtgtgta 1440
agggccagtc ttccgtatctt ggaagctcaa gcataacttg aatgaaaata ttttgaaatg 1500
acctaattat ctaagacttt attttaaata ttgttatctt caaagaagca ttagagggta 1560
cagttttttt tttttaaatg cacttctggt aaatactttt gttgaaaaca ctgaatttgt 1620
aaaaggtaat acttactatt tttcaatttt tccctcctag gatttttttc ccctaataa 1680
tgtaagatgg caaaatttgc cctgaaatag gttttacatg aaaactccaa gaaaagttaa 1740
acatgtttca gtgaatagag atcctgctcc tttggcaagt tcctaaaaaa cagtaataga 1800
tacgaggtga tgcgcctgct agtggcaagg tttaagatat ttctgatctc gtgcc 1855

```

```

<210> 298
<211> 1059
<212> DNA
<213> Homo sapiens

```

```

<400> 298
gcaacgtggg cacttctgga gaccacaacg actcctctgt gaagacgctt gggagcaaga 60
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gcgcttgrgg agactmcgat gacagygcct tcatggagcc caggtaccac gtccgtggag 180
aagatctgga caagctccac agagctgccc tgggtgggta aagtccccag aaaggatctc 240
atogtcatgc tcagggacac tgaygtgaac aagarggaca agcaaaagag gactgctcta 300
catctggcct ctgccaatgg gaattcagaa gtagtataac tcstgctgga cagacgatgt 360
caacttaatg tccttgacaa caaaaagagg acagctctga yaaaggccgt acaatgccag 420
gaagatgaat gtgctgtaat gttgctggaa catggcactg atccaaatat tccagatgag 480
tatggaaata ccaactctca ctaygctrct tayaatgaag ataaattaat ggccaaagca 540
ctgctcttat ayygtgctga tatcgaatca aaaaacaagg tatagatcta ctaattttat 600
cttcaaaata ctgaaatgca ttcattttta cattgacgtg tgtaagggcc agtcttccgt 660
atttggaagc tcaagcataa cttgaatgaa aatattttga aatgacctaa ttatctaaga 720
ctttatttta aatattgtta ttttcaaaga agcattagag ggtacagttt ttttttttta 780
aatgcacttc tggtaaatac ttttggtgaa aacactgaat ttgtaaaagg taatacttac 840
tatttttcaa tttttccctc ctaggatttt tttcccctaa tgaatgtaag atggcaaaat 900
ttgccctgaa ataggtttta catgaaaact ccaagaaaag ttaaacaatg ttcagtgaat 960
agagatcctg ctcccttggc aagttcctaa aaaacagtaa tagatacgag gtgatgcgcc 1020
tgtcagtggc aaggtttaag atatttctga tctcgtgcc 1059

```

```

<210> 299
<211> 329
<212> PRT
<213> Homo sapiens

```

```

<400> 299
Met Asp Ile Val Val Ser Gly Ser His Pro Leu Trp Val Asp Ser Phe
  1             5             10            15
Leu His Leu Ala Gly Ser Asp Leu Leu Ser Arg Ser Leu Met Ala Glu
          20            25            30
Glu Tyr Thr Ile Val His Ala Ser Phe Ile Ser Cys Ile Ser Ser Ser

```



```

      35              40              45
Leu Asp Gly Gln Gly Glu Arg Gln Glu Gln Arg Gly His Phe Trp Arg
   50              55              60
Pro Gln Arg Leu Leu Cys Glu Asp Ala Trp Glu Gln Glu Val Gln Val
65              70              75              80
Val Leu Pro Leu Leu Pro Leu Leu Gln Gly Ser Gly Lys Ser Asn Val
      85              90              95
Val Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe Met Asp Pro Arg Tyr
      100              105              110
His Val His Gly Glu Asp Leu Asp Lys Leu His Arg Ala Ala Trp Trp
      115              120              125
Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met Leu Arg Asp Thr Asp
      130              135              140
Val Asn Lys Arg Asp Lys Gln Lys Arg Thr Ala Leu His Leu Ala Ser
145              150              155              160
Ala Asn Gly Asn Ser Glu Val Val Lys Leu Val Leu Asp Arg Arg Cys
      165              170              175
Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr Ala Leu Thr Lys Ala
      180              185              190
Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met Leu Leu Glu His Gly
      195              200              205
Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn Thr Thr Leu His Tyr
      210              215              220
Ala Val Tyr Asn Glu Asp Lys Leu Met Ala Lys Ala Leu Leu Leu Tyr
225              230              235              240
Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly Leu Thr Pro Leu Leu
      245              250              255
Leu Gly Ile His Glu Gln Lys Gln Gln Val Val Lys Phe Leu Ile Lys
      260              265              270
Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr Gly Arg Thr Ala Leu
      275              280              285
Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile Val Ser Pro Leu Leu
      290              295              300
Glu Gln Asn Val Asp Val Ser Ser Gln Asp Leu Glu Arg Arg Pro Glu
305              310              315              320
Ser Met Leu Phe Leu Val Ile Ile Met
      325

```

<210> 300
 <211> 148
 <212> PRT
 <213> Homo sapiens

<220>
 <221> VARIANT
 <222> 3, 46, 69, 88, 124
 <223> Xaa = Any Amino Acid

<400> 300
 Met Thr Xaa Pro Ser Trp Ser Pro Gly Thr Thr Ser Val Glu Lys Ile
 1 5 10 15
 Trp Thr Ser Ser Thr Glu Leu Pro Trp Trp Gly Lys Val Pro Arg Lys
 20 25 30

Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
 370 375 380

<210> 305
 <211> 656
 <212> PRT
 <213> Homo sapiens

<400> 305
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1 5 10 15
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
 20 25 30
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85 90 95
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 100 105 110
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155 160
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
 165 170 175
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205

09924400-080704

Ala	Leu	Ile	Lys	Ala	Val	Gln	Cys	Gln	Glu	Asp	Glu	Cys	Ala	Leu	Met
210						215					220				
Leu	Leu	Glu	His	Gly	Thr	Asp	Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly	Asn
225					230					235					240
Thr	Thr	Leu	His	Tyr	Ala	Ile	Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala	Lys
			245						250					255	
Ala	Leu	Leu	Leu	Tyr	Gly	Ala	Asp	Ile	Glu	Ser	Lys	Asn	Lys	His	Gly
		260						265					270		
Leu	Thr	Pro	Leu	Leu	Leu	Gly	Val	His	Glu	Gln	Lys	Gln	Gln	Val	Val
	275						280					285			
Lys	Phe	Leu	Ile	Lys	Lys	Lys	Ala	Asn	Leu	Asn	Ala	Leu	Asp	Arg	Tyr
290						295					300				
Gly	Arg	Thr	Ala	Leu	Ile	Leu	Ala	Val	Cys	Cys	Gly	Ser	Ala	Ser	Ile
305					310					315					320
Val	Ser	Leu	Leu	Leu	Glu	Gln	Asn	Ile	Asp	Val	Ser	Ser	Gln	Asp	Leu
			325						330					335	
Ser	Gly	Gln	Thr	Ala	Arg	Glu	Tyr	Ala	Val	Ser	Ser	His	His	His	Val
			340					345					350		
Ile	Cys	Gln	Leu	Leu	Ser	Asp	Tyr	Lys	Glu	Lys	Gln	Met	Leu	Lys	Ile
	355					360						365			
Ser	Ser	Glu	Asn	Ser	Asn	Pro	Glu	Gln	Asp	Leu	Lys	Leu	Thr	Ser	Glu
370					375						380				
Glu	Glu	Ser	Gln	Arg	Phe	Lys	Gly	Ser	Glu	Asn	Ser	Gln	Pro	Glu	Lys
385					390					395					400
Met	Ser	Gln	Glu	Pro	Glu	Ile	Asn	Lys	Asp	Gly	Asp	Arg	Glu	Val	Glu
			405						410					415	
Glu	Glu	Met	Lys	Lys	His	Glu	Ser	Asn	Asn	Val	Gly	Leu	Leu	Glu	Asn
		420						425				430			
Leu	Thr	Asn	Gly	Val	Thr	Ala	Gly	Asn	Gly	Asp	Asn	Gly	Leu	Ile	Pro
	435						440					445			
Gln	Arg	Lys	Ser	Arg	Thr	Pro	Glu	Asn	Gln	Gln	Phe	Pro	Asp	Asn	Glu
	450					455					460				
Ser	Glu	Glu	Tyr	His	Arg	Ile	Cys	Glu	Leu	Val	Ser	Asp	Tyr	Lys	Glu
465					470					475					480
Lys	Gln	Met	Pro	Lys	Tyr	Ser	Ser	Glu	Asn	Ser	Asn	Pro	Glu	Gln	Asp
			485					490						495	
Leu	Lys	Leu	Thr	Ser	Glu	Glu	Glu	Ser	Gln	Arg	Leu	Glu	Gly	Ser	Glu
		500						505					510		
Asn	Gly	Gln	Pro	Glu	Leu	Glu	Asn	Phe	Met	Ala	Ile	Glu	Glu	Met	Lys
	515						520					525			
Lys	His	Gly	Ser	Thr	His	Val	Gly	Phe	Pro	Glu	Asn	Leu	Thr	Asn	Gly
530						535					540				
Ala	Thr	Ala	Gly	Asn	Gly	Asp	Asp	Gly	Leu	Ile	Pro	Pro	Arg	Lys	Ser
545					550					555					560
Arg	Thr	Pro	Glu	Ser	Gln	Gln	Phe	Pro	Asp	Thr	Glu	Asn	Glu	Glu	Tyr
			565						570					575	
His	Ser	Asp	Glu	Gln	Asn	Asp	Thr	Gln	Lys	Gln	Phe	Cys	Glu	Glu	Gln
		580						585				590			
Asn	Thr	Gly	Ile	Leu	His	Asp	Glu	Ile	Leu	Ile	His	Glu	Glu	Lys	Gln
	595						600					605			
Ile	Glu	Val	Val	Glu	Lys	Met	Asn	Ser	Glu	Leu	Ser	Leu	Ser	Cys	Lys
610						615					620				
Lys	Glu	Lys	Asp	Ile	Leu	His	Glu	Asn	Ser	Thr	Leu	Arg	Glu	Glu	Ile
625					630					635					640

Ala Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
 645 650 655

<210> 306
 <211> 671
 <212> PRT
 <213> Homo sapiens

<400> 306
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 1 5 10 15
 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
 20 25 30
 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45
 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60
 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80
 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85 90 95
 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 100 105 110
 Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125
 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140
 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155 160
 Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
 165 170 175
 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190
 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205
 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
 210 215 220
 Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350

0054400-000704

Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp Leu Lys Leu Thr Ser Glu
 370 375 380
 Glu Glu Ser Gln Arg Phe Lys Gly Ser Glu Asn Ser Gln Pro Glu Lys
 385 390 395 400
 Met Ser Gln Glu Pro Glu Ile Asn Lys Asp Gly Asp Arg Glu Val Glu
 405 410 415
 Glu Glu Met Lys Lys His Glu Ser Asn Asn Val Gly Leu Leu Glu Asn
 420 425 430
 Leu Thr Asn Gly Val Thr Ala Gly Asn Gly Asp Asn Gly Leu Ile Pro
 435 440 445
 Gln Arg Lys Ser Arg Thr Pro Glu Asn Gln Gln Phe Pro Asp Asn Glu
 450 455 460
 Ser Glu Glu Tyr His Arg Ile Cys Glu Leu Val Ser Asp Tyr Lys Glu
 465 470 475 480
 Lys Gln Met Pro Lys Tyr Ser Ser Glu Asn Ser Asn Pro Glu Gln Asp
 485 490 495
 Leu Lys Leu Thr Ser Glu Glu Glu Ser Gln Arg Leu Glu Gly Ser Glu
 500 505 510
 Asn Gly Gln Pro Glu Lys Arg Ser Gln Glu Pro Glu Ile Asn Lys Asp
 515 520 525
 Gly Asp Arg Glu Leu Glu Asn Phe Met Ala Ile Glu Glu Met Lys Lys
 530 535 540
 His Gly Ser Thr His Val Gly Phe Pro Glu Asn Leu Thr Asn Gly Ala
 545 550 555 560
 Thr Ala Gly Asn Gly Asp Asp Gly Leu Ile Pro Pro Arg Lys Ser Arg
 565 570 575
 Thr Pro Glu Ser Gln Gln Phe Pro Asp Thr Glu Asn Glu Glu Tyr His
 580 585 590
 Ser Asp Glu Gln Asn Asp Thr Gln Lys Gln Phe Cys Glu Glu Gln Asn
 595 600 605
 Thr Gly Ile Leu His Asp Glu Ile Leu Ile His Glu Glu Lys Gln Ile
 610 615 620
 Glu Val Val Glu Lys Met Asn Ser Glu Leu Ser Leu Ser Cys Lys Lys
 625 630 635 640
 Glu Lys Asp Ile Leu His Glu Asn Ser Thr Leu Arg Glu Glu Ile Ala
 645 650 655
 Met Leu Arg Leu Glu Leu Asp Thr Met Lys His Gln Ser Gln Leu
 660 665 670

<210> 307
 <211> 800
 <212> DNA
 <213> Homo sapiens

<400> 307
 atkagcttcc gcttctgaca aactagaga tccctcccct ccctcagggt atggccctcc 60
 acttcatitt tggtacataa catctttata ggacaggggt aaaatcccaa tactaacagg 120
 agaatgctta ggactctaac aggtttttga gaatgtgttg gtaagggccca ctcaatccaa 180
 tttttcttgg tctccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
 catcagtaag ggccactaaa tccgaccttc ctcgttcctc cttgtggtct gggaggaaaa 300
 ctagtgtttc tggtgtgtg tcaagttagca caactattcc gatcagcagg gtccaggggac 360


```

cactgcaggt tcttgggcag ggggagaaac aaaacaaacc aaaacccatgg gcrgttttgt 420
ctttcagatg ggaaacactc aggcacatcaac aggcacacct ttgaaatgca tcctaagcca 480
atgggacaaa tttgacccac aaaccctgga aaaagagggtg gctcattttt tttgcactat 540
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaag ggagtgaagt 660
acottatgtc caagctttct tttcattgaa ggagaatata ctatgcaaag cttgaaattt 720
acatcccaca ggaggacctc tcagcttacc cccatatacct agcctcccta tagctcccct 780
tcctattagt gataagcctc                                     800

```

<210> 308

<211> 102

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 3

<223> Xaa = Any Amino Acid

<400> 308

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Met Gly Xaa Phe Val Phe Gln Met Gly Asn Thr Gln Ala Ser Thr Gly
 1              5              10              15
Ser Pro Leu Lys Cys Ile Leu Ser Gln Trp Asp Lys Phe Asp Pro Gln
      20              25              30
Thr Leu Glu Lys Glu Val Ala His Phe Phe Cys Thr Met Ala Trp Pro
      35              40              45
Gln His Ser Leu Ser Asp Gly Glu Lys Trp Pro Pro Glu Gly Ser Thr
      50              55              60
Asp Tyr Asn Thr Ile Leu Gln Leu Asp Leu Phe Cys Lys Arg Glu Gly
65              70              75              80
Lys Trp Ser Glu Ile Pro Tyr Val Gln Ala Phe Phe Ser Leu Lys Glu
      85              90              95
Asn Thr Leu Cys Lys Ala
      100

```

<210> 309

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in the lab

<400> 309

```

Leu Met Ala Glu Glu Tyr Thr Ile Val
 1              5

```

<210> 310

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in the lab

<400> 310

Lys Leu Met Ala Lys Ala Leu Leu Leu
1 5

<210> 311

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in the lab

<400> 311

Gly Leu Thr Pro Leu Leu Leu Gly Ile
1 5

<210> 312

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Made in the lab

<400> 312

Lys Leu Val Leu Asp Arg Arg Cys Gln Leu
1 5 10

<210> 313

<211> 1852

<212> DNA

<213> Homo sapiens

<400> 313

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ggcacgagaa ttaaaaccct cagcaaaaaca ggcataagaag ggacatacct taaagtaata 60
aaaaccacct atgacaagcc cacagccaac ataatactaa atggggaaaa gttagaagca 120
tttcctctga gaactgcaac aataaatata aggatgctgg attttgtcaa atgccttttc 180
tgtgtctgtt gagatgctta tgtgactttg cttttaattc tgtttatgtg attatcacat 240
ttattgactt gcctgtgtta gaccggaaga gctgggggtg ttctcaggag ccaccgtgtg 300
ctgcggcagc ttcgggataa cttgaggctg catcactggg gaagaaacac aytctgtgcc 360
gtggcgctga tggctgagga cagagcttca gtgtggcttc tctgcgactg gcttcttcgg 420
ggagtctctc cttcatagtt catccatatg gctccagagg aaaattatat tattttgtta 480
tgatgaaga gtattacgtt gtgcagatat actgcagtgt cttcatctct tgatgtgtga 540
ttgggtaggt tccaccatgt tgccgcagat gacatgattt cagtacctgt gtctggctga 600
aaagtgtttg tttgtgaatg gatattgtgg tttctggatc tcatcctctg tgggtggaca 660
gctttctcca ccttgctgga agtgacctgc tgtccagaag tttgatggct gaggagtata 720
ccatcgtgca tgcattcttc atttcctgca tttcttcctc cctggatgga cagggggagc 780
ggcaagagca acgtgggcac ttctggagac cacaacgact cctctgtgaa gacgcttggg 840

```

```

agcaagaggt gcaagtgggt ctgccactgc ttccccctgct gcagggggag cggcaagagc 900
aacgtgggtcg cttgggggaga ctacgatgac agcgccttca tggatcccag gtaccacgtc 960
catggagaag atctggacaa gctccacaga gctgcctggt ggggtaaaagt ccccagaaaag 1020
gatctcatcg tcatgctcag ggacacggat gtgaacaaga gggacaagca aaagaggact 1080
gctctacatc tggcctctgc caatgggaat tcagaagtag taaaactcgt gctggacaga 1140
cgatgtcaac ttaatgtcct tgacaacaaa aagaggacag ctctgacaaa ggccgtacaa 1200
tgccaggaag atgaatgtgc gttaatgttg ctggaacatg gcactgatcc aaatattcca 1260
gatgagtatg gaaataccac tctacactat gctgtctaca atgaagataa attaattggc 1320
aaagcactgc tcttatacgg tgctgatatc gaatcaaaaa acaagcatgg cctcacacca 1380
ctgctacttg gtatacatga gcaaaaacag caagtgggtga aatttttaat caagaaaaaa 1440
gcgaatttaa atgcgctgga tagatatgga agaactgctc tcatacttgc tgtatgttgt 1500
ggatcagcaa gtatagtcag cctctactt gagcaaaatg ttgatgtatc ttctcaagat 1560
ctggaaagac ggccagagag tatgctgttt ctagtcatca tcatgtaatt tgccagttac 1620
tttctgacta caaagaaaaa cagatgttaa aaatctcttc tgaaaacagc aatccagaac 1680
aagacttaaa gctgacatca gaggaagagt cacaaaggct taaaggaagt gaaaacagcc 1740
agccagagct agaagattta tggctattga agaagaatga agaacacgga agtactcatg 1800
tgggattccc agaaaacctg actaacggtg ccgctgctgg caatggtgat ga 1852

```

```

<210> 314
<211> 879
<212> DNA
<213> Homo sapiens

```

```

<400> 314
atgcattctt catttctctgc atttcttctt ccttggtatgg acagggggag cggcaagagc 60
aacgtgggca cttcttgaga ccacaacgac tcctctgtga agacgcttgg gagcaagagg 120
tgcaagtggg gctgccactg cttccccctgc tgcaggggga gcggcaagag caacgtggtc 180
gcttggggag actacgatga cagcgccttc atggatccca ggtaccacgt ccatggagaa 240
gatctggaca agctccacag agctgcctgg tggggtaaag tccccagaaa ggatctcatc 300
gtcatgctca gggacacgga tgtgaacaag agggacaagc aaaagaggac tgctctacat 360
ctggcctctg ccaatgggaa ttcagaagta gtaaaactcg tgctggacag acgatgtcaa 420
cttaatgtcc ttgacaacaa aaagaggaca gctctgacaa aggccgtaca atgccaggaa 480
gatgaatgtg cgttaatgtt gctggaacat ggcactgatc caaatattcc agatgagtat 540
ggaaatacca ctctacacta tgctgtctac aatgaagata aattaatggc caaagcactg 600
ctcttatacg gtgctgatat cgaatcaaaa aacaagcatg gcctcacacc actgctactt 660
ggtatacatg agcaaaaaca gcaagtgggt aaatttttaa tcaagaaaaa agcgaattta 720
aatgcgctgg atagatatgg aagaactgct ctcatacttg ctgtatgttg tggatcagca 780
agtatagtca gccctctact tgagcaaaat gttgatgtat cttctcaaga tctggaaaga 840
cggccagaga gtatgctgtt tctagtcatc atcatgtaa 879

```

```

<210> 315
<211> 292
<212> PRT
<213> Homo sapiens

```

```

<400> 315
Met His Leu Ser Phe Pro Ala Phe Leu Pro Pro Trp Met Asp Arg Gly
          5                      10                      15

Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp His Asn Asp Ser Ser
          20                      25                      30

Val Lys Thr Leu Gly Ser Lys Arg Cys Lys Trp Cys Cys His Cys Phe

```


<400> 316

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agttgggcca aattcccctc cccctacagc ttgaagggga cataaccaat agcctgggggt 60
ttttttgtgg tcctttggag atttctttgc ttattttctt ctgggtgggg gtgattagag 120
gaggcttata actaatagga aggggagcta tagggaggct aggatatggg ggtaagctga 180
gaggtcctcc tgtgggatgt aaatttcaag ctttgcatag tgtattctcc ttcaatgaaa 240
agaaagcttg gacataaggt atttcaactc atttgccctc cctcttacag aaaagggtcaa 300
gctgcaggat agtattgtaa tctgtacttc cctcagggtg ccatttttcc ccatcagaga 360
gagaatgttg gggccaagcc atagtgcaga aaaaaaatg agccacctct ttttccaggg 420
tttgtgggtc aaatttgtcc cattggctta ggatgcattt caaagggtgag cctgttgatg 480
cctgagtgtt tcccatctga aagacaaaac tgcccattgt tttggtttgt tttgtttctc 540
ccoctgcccc agaactatca aactcctgag ccaacaacta aaaa 584

```

<210> 317

<211> 829

<212> DNA

<213> Homo sapiens

<400> 317

```

attagcttcc gcttctgaca acactagaga tccctcccct ccctcagggt atggccctcc 60
acttcatttt tggtagataa catctttata ggacaggggt aaaatcccaa tactaacagg 120
agaatgctta ggactctaac aggtttttga gaatgtgttg gtaagggcca ctcaatccaa 180
tttttcttgg tcttccttgt ggtctaggag gacaggcaag ggtgcagatt ttcaagaatg 240
catcagtaag ggccactaaa tccgaccttc ctctgttctc cttgtggtct gggaggaaaa 300
ctagtgtttc tgttgctgtg tcagttagca caactattcc gatcagcagg gtccaggagc 360
cactgcagggt tcttgggcag ggggagaaac aaaacaaacc aaaaccatgg gcagttttgt 420
ctttcagatg ggaaacactc aggcataaac aggtcacct ttgaaatgca tcctaagcca 480
atgggacaaa tttagaccac aaaccctgga aaaagagggt gctcattttt tttgcactat 540
ggcttggccc caacattctc tctctgatgg ggaaaaatgg ccacctgagg gaagtacaga 600
ttacaatact atcctgcagc ttgacctttt ctgtaagagg gaaggcaaat ggagtgaat 660
accttatgtc caagctttct tttcattgaa ggagaataga ctatgcaaag cttgaaat 720
acatcccaca ggaggacctc tcagcttacc cccatatcct agcctcccta tagctcccct 780
tcctattagt gataagcctc ctctaatac cccacccag aagaaaata 829

```

<210> 318

<211> 30

<212> PRT

<213> Homo sapien

<400> 318

```

Thr Ala Ala Ser Asp Asn Phe Gln Leu Ser Gln Gly Gly Gln Gly Phe
1           5           10          15

```

```

Ala Ile Pro Ile Gly Gln Ala Met Ala Ile Ala Gly Gln Ile
          20          25          30

```

<210> 319

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 319

ggcctctgcc aatgggaact cagaagtagt aaaactcctg c 41

<210> 320

<211> 41

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 320

gcaggagttt tactacttct gagttcccat tggcagaggc c 41

<210> 321

<211> 60

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 321

ggggaattcc cgctggtgcc ggcgggcagc cctatggtgg ttgaggttga 50

ttccatgccg 60

<210> 322

<211> 42

<212> DNA

<213> Artificial Sequence

<220>

<223> PCR primer

<400> 322

cccgaattct tatttatttc tggttottga gacattttct gg 42

<210> 323

<211> 1590

<212> DNA

<213> Homo sapiens

<400> 323

atgcatcacc atcaccatca cacggccgcg tccgataact tccagctgtc ccagggtggg 60
cagggattcg ccattccgat cgggcaggcg atggcgatcg cgggccagat caagcttccc 120

Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His
405 410 415

Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val
420 425 430

Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg
435 440 445

Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser
450 455 460

Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp
465 470 475 480

Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His
485 490 495

Val Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys
500 505 510

Ile Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn
515 520 525

Lys

<210> 325
<211> 1155
<212> DNA
<213> Homo sapiens

<400> 325
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aggagcaaga tgggcaagt gtgccaccac cgcttcccct gctgcagggg gagcggcaag 120
agcaacatgg gcacttctgg agaccacgac gactccttta tgaagatgct caggagcaag 180
atgggcaagt gttgccgcca ctgcttcccc tgctgcaggg ggagcggcac gagcaacgtg 240
ggcacttctg gagaccatga aaactccttt atgaagatgc tcaggagcaa gatgggcaag 300
tggtgctgtc actgcttccc ctgctgcagg gggagcggca agagcaaacgt gggcgcttgg 360
ggagactacg accacagcgc cttcatggag ccgaggtacc acatccgtcg agaagatctg 420
gacaagctcc acagagctgc ctggtggggg aaagtcccca gaaaggatct catcgtcatg 480
ctcagggaca ctgacatgaa caagaggac aaggaaaaga ggactgctct acatttggcc 540
tctgccaatg gaaattcaga agtagtacia ctctgctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaaaag gacagctctg ataaaggcca tacaatgcca ggaagatgaa 660
tgtgtgttaa tgttgctgga acatggcgct gatcgaaata ttccagatga gtatggaaat 720
accgctctac actatgctat ctacaatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atattgaatc aaaaaacaag gttggcctca caccactttt gcttggcgta 840
catgaacaaa aacagcaagt ggtgaaattt ttaatcaaga aaaaagctaa tttaaatgta 900
cttgatagat atggaaggac tgccctcata cttgctgtat gttgtggatc agcaagtata 960
gtcaatcttc tacttgagca aaatgttgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gtgaattact ttctgactat 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaata aataa 1155


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ggagactacg accacagcgc cttcatggag ccgaggtacc acatccgtcg agaagatctg 420
gacaagctcc acagagctgc ctggtggggt aaagtcccca gaaaggatct catcgtcatg 480
ctcagggaca ctgacatgaa caagagggac aaggaaaaga ggactgctct acatttggcc 540
tctgccaatg gaaattcaga agtagtacia ctctgtctgg acagacgatg tcaacttaat 600
gtccttgaca acaaaaaaag gacagctctg ataaaggcca tacaatgcca ggaagatgaa 660
tgtgtgttaa tgttgctgga acatggcgct gatcgaaata ttccagatga gtatggaaat 720
accgctctac actatgctat ctacaatgaa gataaattaa tggccaaagc actgctctta 780
tatggtgctg atattgaatc aaaaaacaag tgtggcctca caccactttt gcttggcgta 840
catgaacaaa aacagcaagt ggtgaaattt ttaatcaaga aaaaagctaa tttaaagtga 900
cttgatagat atggaagaac tgccctcata cttgctgtat gttgtggatc agcaagtata 960
gtcaatcttc tacttgagca aaatgttgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gtgaattact ttctgactat 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaaata aataa                                     1155

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```

<210> 331
<211> 210
<212> PRT
<213> Homo sapiens

```

```

<400> 331
Thr Ala Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys
          5                      10                      15

Leu Leu Leu Asp Arg Arg Cys Gln Leu Asn Ile Leu Asp Asn Lys Lys
          20                      25                      30

Arg Thr Ala Leu Thr Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala
          35                      40                      45

Leu Met Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr
          50                      55                      60

Gly Asn Thr Ala Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met
          65                      70                      75                      80

Ala Lys Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys
          85                      90                      95

His Gly Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln
          100                     105                     110

Val Val Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp
          115                     120                     125

Arg Tyr Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala
          130                     135                     140

Ser Ile Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln
          145                     150                     155                     160

Asp Leu Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser Arg His
          165                     170                     175

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355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
 370 375 380

 <210> 334
 <211> 384
 <212> PRT
 <213> Homo sapiens

 <400> 334
 Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 5 10 15

 Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
 20 25 30

 Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45

 His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60

 Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
 65 70 75 80

 Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
 85 90 95

 Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
 100 105 110

 Ser Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
 115 120 125

 Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
 130 135 140

 Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
 145 150 155 160

 Leu Arg Asp Thr Asp Val Asn Lys Gln Asp Lys Gln Lys Arg Thr Ala
 165 170 175

 Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
 180 185 190

 Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
 195 200 205

 Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
 210 215 220

0024100-000704
 102000-0014660

Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn
 225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
 370 375 380

<210> 335
 <211> 1185
 <212> DNA
 <213> Homo sapiens

<400> 335
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 aggagcaaga tgggcaagtg gtgctgccgt tgcttcccct gctgcaggga gagcggcaag 120
 agcaacgtgg gcatttcttg agaccacgac gactctgcta tgaagacact caggagcaag 180
 atgggcaagt ggtgccgcca ctgcttcccc tgctgcaggg ggagtggcaa gagcaacgtg 240
 ggcgcttctg gagaccacga cgactctgct atgaagacac tcaggaacaa gatgggcaag 300
 tgggtgctgcc actgcttccc ctgctgcagg gggagcggca agagcaaggt gggcgcttgg 360
 ggagactacg atgacagtgc cttcatggag ccaggtacc acgtccgtgg agaagatctg 420
 gacaagctcc acagagctgc ctgggtgggg aaagtcccca gaaaggatct catcgatcatg 480
 ctgagggaca ctgacgtgaa caagaaggac aagcaaaaaga ggactgctct acatctggcc 540
 tctgccaatg ggaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
 gtccttgaca acaaaaagag gacagctctg ataaaggccg tacaatgcca ggaagatgaa 660
 tgtgcgttaa tgttgctgga acatggcact gatccaaata ttccagatga gtatggaaat 720
 accactctgc actacgctat ctataatgaa gataaattaa tggccaaagc actgctctta 780
 tatggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttgggtgta 840
 catgagcaaa aacagcaagt cgtgaaattt ttaatcaaga aaaaagcgaa tttaaatgca 900
 ctggatagat atggaaggac tgctctcata cttgctgtat gttgtggatc agcaagtata 960

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gtcagccttc tacttgagca aaatattgat gtatcttctc aagatctatc tggacagacg 1020
gccagagagt atgctgtttc tagtcatcat catgtaattt gccagttact ttctgactac 1080
aaagaaaaac agatgctaaa aatctcttct gaaaacagca atccagaaaa tgtctcaaga 1140
accagaaata aacatcatca ccatcatcat caccatcacc attaa 1185

```

<210> 336

<211> 394

<212> PRT

<213> Homo sapiens

<400> 336

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Met Val Val Glu Val Asp Ser Met Pro Ala Ala Ser Ser Val Lys Lys
      5                      10                      15

Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Cys Arg Cys Phe
      20                      25                      30

Pro Cys Cys Arg Glu Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
      35                      40                      45

His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
      50                      55                      60

Cys Arg His Cys Phe Pro Cys Cys Arg Gly Ser Gly Lys Ser Asn Val
      65                      70                      75                      80

Gly Ala Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Asn
      85                      90                      95

Lys Met Gly Lys Trp Cys Cys His Cys Phe Pro Cys Cys Arg Gly Ser
      100                     105                     110

Gly Lys Ser Lys Val Gly Ala Trp Gly Asp Tyr Asp Asp Ser Ala Phe
      115                     120                     125

Met Glu Pro Arg Tyr His Val Arg Gly Glu Asp Leu Asp Lys Leu His
      130                     135                     140

Arg Ala Ala Trp Trp Gly Lys Val Pro Arg Lys Asp Leu Ile Val Met
      145                     150                     155                     160

Leu Arg Asp Thr Asp Val Asn Lys Lys Asp Lys Gln Lys Arg Thr Ala
      165                     170                     175

Leu His Leu Ala Ser Ala Asn Gly Asn Ser Glu Val Val Lys Leu Leu
      180                     185                     190

Leu Asp Arg Arg Cys Gln Leu Asn Val Leu Asp Asn Lys Lys Arg Thr
      195                     200                     205

Ala Leu Ile Lys Ala Val Gln Cys Gln Glu Asp Glu Cys Ala Leu Met
      210                     215                     220

Leu Leu Glu His Gly Thr Asp Pro Asn Ile Pro Asp Glu Tyr Gly Asn

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092400-000701

225 230 235 240
 Thr Thr Leu His Tyr Ala Ile Tyr Asn Glu Asp Lys Leu Met Ala Lys
 245 250 255
 Ala Leu Leu Leu Tyr Gly Ala Asp Ile Glu Ser Lys Asn Lys His Gly
 260 265 270
 Leu Thr Pro Leu Leu Leu Gly Val His Glu Gln Lys Gln Gln Val Val
 275 280 285
 Lys Phe Leu Ile Lys Lys Lys Ala Asn Leu Asn Ala Leu Asp Arg Tyr
 290 295 300
 Gly Arg Thr Ala Leu Ile Leu Ala Val Cys Cys Gly Ser Ala Ser Ile
 305 310 315 320
 Val Ser Leu Leu Leu Glu Gln Asn Ile Asp Val Ser Ser Gln Asp Leu
 325 330 335
 Ser Gly Gln Thr Ala Arg Glu Tyr Ala Val Ser Ser His His His Val
 340 345 350
 Ile Cys Gln Leu Leu Ser Asp Tyr Lys Glu Lys Gln Met Leu Lys Ile
 355 360 365
 Ser Ser Glu Asn Ser Asn Pro Glu Asn Val Ser Arg Thr Arg Asn Lys
 370 375 380
 His His His His His His His His His His
 385 390

<210> 337
 <211> 34
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 337
 cggcggatcc accatggtgg ttgaggttga ttcc

34

<210> 338
 <211> 74
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR primer

<400> 338

cggtctctaga ttaatggtga tggatgatgat gatggtgatg atgtttatatt ctggttcttg 60
 agacattttc tgga 74

<210> 339

<211> 1166

<212> DNA

<213> Homo sapiens

<400> 339

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 agcaacgtgg gcaattcttg agaccacgac gattctgcta tgaagacact caggagcaag 180
 atgggcaagt ggtgccgcca ctgcttcccc tggatgcagg ggagcagcaa gagcaacgtg 240
 ggcattcttg gagaccacga cgactctgct atgaagacac tcaggagcaa gatgggcaag 300
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 ggagactacg acgacagcgc ttcatggag ccgaggtacc acgtccgtcg agaagatctg 420
 gacaagctcc acagagctgc ctggtggggg aaagtcccca gaaaggatct catcgtcatg 480
 ctcaaggaca ctgacatgaa caagaaggac aagcaaaaaga ggactgctct acatctggcc 540
 tctgccaatg gaaattcaga agtagtaaaa ctctgctgg acagacgatg tcaacttaat 600
 atccttgaca aaaaaagag gagagctctg acaaaggccg tacaatgccg ggaagatgaa 660
 tgtgcgttaa tgttgctgga acatggcact gatccgaata ttccagatga gtatggaaat 720
 accgctctac actatgctat ctacaatgaa gataaattaa tggccaaagc actgctctta 780
 tacggtgctg atatcgaatc aaaaaacaag catggcctca caccactgtt acttgggtgta 840
 catgagcaaa aacagcaagt ggtgaaattc ttaatcaaga aaaaagcaaa tttaaatgca 900
 ctggatagat atggaagaac tgctctcata ctgctgtat gttgtggatc ggcaagtata 960
 gtcagccttc tacttgagca aaacattgat gtatcttctc aagatctatc tggacagacg 1020
 gccagagagt atgctgtttc tagtcatcat aatgtaattt gccagttact ttctgactac 1080
 aaagaaaaac agatgctaaa agtctcttct gaaaacagca atccaggaaa tgtctcaaga 1140
 accagaaata aataaggggtg gtgata 1166

<210> 340

<211> 384

<212> PRT

<213> Homo sapiens

<400> 340

Met Val Ala Glu Ala Gly Ser Met Pro Ala Ala Ser Ser Val Lys Lys
 5 10 15

Pro Phe Gly Leu Arg Ser Lys Met Gly Lys Trp Cys Arg His Cys Phe
 20 25 30

Pro Trp Cys Arg Gly Ser Gly Lys Ser Asn Val Gly Thr Ser Gly Asp
 35 40 45

His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser Lys Met Gly Lys Trp
 50 55 60

Cys Arg His Cys Phe Pro Trp Cys Arg Gly Ser Ser Lys Ser Asn Val
 65 70 75 80

Gly Thr Ser Gly Asp His Asp Asp Ser Ala Met Lys Thr Leu Arg Ser

85								90					95				
Lys	Met	Gly	Lys	Trp	Cys	Cys	His	Cys	Phe	Pro	Cys	Cys	Arg	Gly	Ser		
			100						105					110			
Gly	Lys	Ser	Lys	Val	Gly	Pro	Trp	Gly	Asp	Tyr	Asp	Asp	Ser	Ala	Phe		
		115					120					125					
Met	Glu	Pro	Arg	Tyr	His	Val	Arg	Arg	Glu	Asp	Leu	Asp	Lys	Leu	His		
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Arg	Ala	Ala	Trp	Trp	Gly	Lys	Val	Pro	Arg	Lys	Asp	Leu	Ile	Val	Met		
145					150					155					160		
Leu	Lys	Asp	Thr	Asp	Met	Asn	Lys	Lys	Asp	Lys	Gln	Lys	Arg	Thr	Ala		
				165					170					175			
Leu	His	Leu	Ala	Ser	Ala	Asn	Gly	Asn	Ser	Glu	Val	Val	Lys	Leu	Leu		
			180						185					190			
Leu	Asp	Arg	Arg	Cys	Gln	Leu	Asn	Ile	Leu	Asp	Asn	Lys	Lys	Arg	Thr		
		195					200					205					
Ala	Leu	Thr	Lys	Ala	Val	Gln	Cys	Arg	Glu	Asp	Glu	Cys	Ala	Leu	Met		
	210					215					220						
Leu	Leu	Glu	His	Gly	Thr	Asp	Pro	Asn	Ile	Pro	Asp	Glu	Tyr	Gly	Asn		
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Thr	Ala	Leu	His	Tyr	Ala	Ile	Tyr	Asn	Glu	Asp	Lys	Leu	Met	Ala	Lys		
				245					250					255			
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			260						265					270			
Leu	Thr	Pro	Leu	Leu	Leu	Gly	Val	His	Glu	Gln	Lys	Gln	Gln	Val	Val		
		275					280					285					
Lys	Phe	Leu	Ile	Lys	Lys	Lys	Ala	Asn	Leu	Asn	Ala	Leu	Asp	Arg	Tyr		
	290					295					300						
Gly	Arg	Thr	Ala	Leu	Ile	Leu	Ala	Val	Cys	Cys	Gly	Ser	Ala	Ser	Ile		
305					310					315					320		
Val	Ser	Leu	Leu	Leu	Glu	Gln	Asn	Ile	Asp	Val	Ser	Ser	Gln	Asp	Leu		
				325					330					335			
Ser	Gly	Gln	Thr	Ala	Arg	Glu	Tyr	Ala	Val	Ser	Ser	His	His	Asn	Val		
			340						345					350			
Ile	Cys	Gln	Leu	Leu	Ser	Asp	Tyr	Lys	Glu	Lys	Gln	Met	Leu	Lys	Val		
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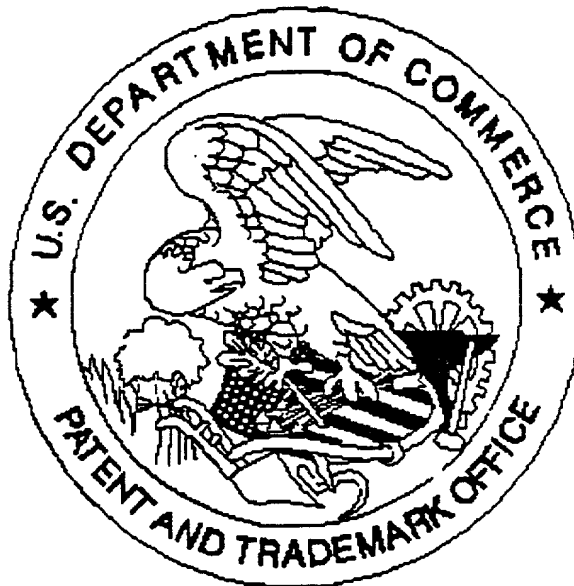
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